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5280
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5340
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5580
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5640
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5820
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5880
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<210> 2972

<211> 632

<212> PRT

<213> Homo sapiens

<400> 2972

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          20           25           30
Lys Lys Met Lys Arg Lys Phe Tyr Ser Trp Glu Glu Cys Met Asn Leu
          35           40           45
Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
          50           55           60
Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
65           70           75           80
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
          85           90           95
Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
          100          105          110
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
          115          120          125
Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
          130          135          140
Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
145          150          155          160
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
          165          170          175
Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
          180          185          190
Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
          195          200          205
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
          210          215          220
Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln
225          230          235          240
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
          245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
          260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
          275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
          290          295          300
Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
305          310          315          320
Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg
          325          330          335
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
          340          345          350
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
          355          360          365
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
          370          375          380
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
385          390          395          400
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp

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405 410 415
 Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg
 420 425 430
 Ile Asp Leu Lys Asn Lys Lys Arg Gln Ser Asp Asp Thr Leu Cys Arg
 435 440 445
 Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly
 450 455 460
 Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr
 465 470 475 480
 Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu
 485 490 495
 Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu
 500 505 510
 Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser
 515 520 525
 Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser
 530 535 540
 Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu
 545 550 555 560
 Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile
 565 570 575
 Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His
 580 585 590
 Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu
 595 600 605
 Ile Pro Arg Pro Pro Ala Ala Gln Pro Val His Gly Arg Thr Asp Trp
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 Ala Ser Lys Tyr Ala Ser Arg Arg
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<210> 2973

<211> 858

<212> DNA

<213> Homo sapiens

<400> 2973

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 120
 gtcagcagcc cagaccccat caggggagag gtggtaaagg catttatagt ccttactcca
 180
 gcctactcct ctcatgaccc agaggcacta acgcgggaac tccaggagca tgtgaaaagg
 240
 gtgactgctc catacaaaac ccccaggaag gtggcctttg tttcagaact gccaaagacg
 300
 gtttctggaa agatccaaag gagtaaattg cgaagtcagg agtgggggaa atgaggtgca
 360
 ccccaggaag gccctgtaga cctccgaaga ctccacaaga aactaatgga tcaactggtca
 420
 gtcccatggt ggagcatcat ctcttcgacc ctaaagatgt caaaggtgtg cagcttccaa
 480
 acggcatccc caggatcact gggcaatgct ggaaagagca aaagaatatc attggccctg
 540

atcacataga tgctgcgccg cctagcaaat gcttggtggt tegacttctc cctctgtctg
 600
 ggggcaggct cagcatctgc ccactggtct cactaagagc tttcagattt ccctccatag
 660
 gacaggttac catagacttg gggcacttgt ggggtactcat tttctgccag tgggaatgta
 720
 aaggettcat cctttgtatg taaccatttg gcaaaagtat gcaggaacat aaaataaaat
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 840
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 858

<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

Gly	Tyr	Phe	Trp	Phe	Met	Gly	Arg	Thr	Asp	Asp	Val	Ile	Asn	Ser	Ser
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Ser	Tyr	Arg	Ile	Gly	Pro	Val	Glu	Val	Glu	Ser	Ala	Leu	Ala	Glu	His
			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
		35					40					45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
	50					55					60				
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70				75					80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
				85					90					95	
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
			100					105						110	
Gln	Glu	Trp	Gly	Lys											
			115												

<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 120
 acaccagaat ccagccaga tactccgcct ggcacccctc tgggtgtcca agatgagaag
 180
 agagatgctg agctgccgaa gaagcgtatg ggggaagtcaa accccggctg ggagaacttg
 240
 gagaagttgc tagtgttcac cgcagctggg gtgaaaccgg ggnncaaggt ggctggcttt
 300
 gatctggacg ggacgctcat caccacacgc tctgggaagg tctttccac tggccccagt
 360

gactggagga tcttgtaccc agagattccc cgtaagctcc gagagctgga agccgagggc
 420
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 480
 gagttcaagg ccaaggtgga ggctgtggtg gagaagctgg ggggtcccctt ccaggtgctg
 540
 gtggccacgc acgcaggctt gtaccggaag ccggtgacgg gcatgtggga ccatctgcag
 600
 gagcaggcca acgacggcac gcccatatcc atcggggaca gcatctttgt gggagacgca
 660
 gccggacgcc cggccaactg ggccccgggg cggaagaaga aagacttctc ctgcgccgat
 720
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 960
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 1020
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 1080
 gcgccaggta cgtccagtgt gcccgagccg cgggcgtccc ctgccgtgc ttcctcttca
 1140
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 1200
 atatccccgt gtcagacatg gtcattgatg gctacaggaa gcagttcgag gcccacgc
 1260
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 1320
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 1380
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 1425

<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

Pro Ser Thr Thr Gly Thr Gln Glu Leu Lys Pro Gly Leu Glu Gly Ser
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 20 25 30
 Thr Leu Arg Trp Glu Glu Thr Arg Thr Pro Glu Ser Gln Pro Asp Thr
 35 40 45
 Pro Pro Gly Thr Pro Leu Val Ser Gln Asp Glu Lys Arg Asp Ala Glu
 50 55 60
 Leu Pro Lys Lys Arg Met Gly Lys Ser Asn Pro Gly Trp Glu Asn Leu
 65 70 75 80
 Glu Lys Leu Leu Val Phe Thr Ala Ala Gly Val Lys Pro Gly Xaa Lys

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<210> 2977
<211> 1420
<212> DNA
<213> Homo sapiens
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<400> 2977
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120
attgcagaga aaagggccgt cctggcccac gtggatgtgc agacgctgtc cagccagctg
180
gcagtgacag tggggcctgg tgaacgtcgg atcgggccag gggagccctt ggaactgctg
240
tgcaatgtgt caggggcact tccccagca ggccgtcatg ctgcatactc tgtaggttgg
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420
gcatccagaa cataccggct acggctagag gctgccaggc ctggtgatgc gggcacctac
480
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cgctgcctcg ccaaagccta tgttcgaggg tctgggaccc ggcttcgtga agcagccagt
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 660
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 720
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 1020
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 1200
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 1260
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 1320
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 1420

<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala	Ala	Glu	Trp	Ile	Gln
		20						25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35				40						45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50				55						60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70						75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105					110		
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

115	120	125
Ala Met Arg Ala Asp Xaa Ile Ala Met Glu Lys Val Ala Ser Arg Thr		
130	135	140
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr		
145	150	155
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg		
165	170	175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu		
180	185	190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val		
195	200	205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly		
210	215	220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro		
225	230	235
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val		
245	250	255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro		
260	265	270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His		
275	280	285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala		
290	295	300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg		
305	310	315
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu		
325	330	335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala		
340	345	350
Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys Arg Leu Arg Lys		
355	360	365

Arg

<210> 2979
 <211> 2191
 <212> DNA
 <213> Homo sapiens

<400> 2979
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 120
 catcatcaac tcattttttt gtatgaataa ccaaaaaatt tcttcaacac ttttttttaa
 180
 gaagaagcta taaataaata aagcttttaa caatcctggg ttcaagttaa acagttccag
 240
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 300
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 360
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 420

gagatgctgc tggcaaagga actgttgacc caaagcaggt ggcctgaatg ggaagtgcc
480
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720
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780
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840
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1140
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1320
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1380
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1440
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1500
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1740
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1980
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2040

ccagcagccg cgcaggtttc cccactggct gcaatggccc taccaaaagc catgttgcac
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 2160
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 2191

<210> 2980

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

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Leu	Leu	Val	Gly	Pro	Leu	Gln	Pro	Val	Gly	Lys	Pro	Ala	Arg	Leu	Leu
			20					25					30		
Gly	Thr	Glu	His	Gly	Gln	Pro	Phe	Ala	Arg	Gly	Trp	Gly	Ala	Trp	Gly
		35					40					45			
Asn	Ala	Arg	Arg	Ala	Arg	Val	Gly	Arg	Ala	Glu	Cys	Leu	Leu	Ser	Gly
	50					55				60					
Arg	Pro	Pro	Thr	Ala	Val	Leu	Pro	Arg	Leu	Val	Glu	Asn	Leu	Lys	Ala
65					70				75					80	
Arg	Val	Pro	Val	Pro	Gly	His	Thr	Glu	Pro	Leu	Trp	Ser	Glu	Gly	Thr
				85				90					95		
Ala	Pro	Gly	Gln	Gly	Leu	Trp	Ser	His	Ala	Pro	Ala	Asp	Gly	Ser	Leu
			100				105					110			
Met	Asn	Leu	Ile	Arg	Thr	Leu	Val	Gly	Ala	Val	Val	Phe	Glu	Leu	Leu
	115					120						125			
Ser	Met	Cys	Phe	Gly	Asp	Gly	Ala	Gly	Ala	Ala	Cys				
	130					135					140				

<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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 120
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 240
 gcangccagc acagttcatc atctgaggaa tccaccaaga gaaccagcca ttccaaactt
 300
 ccggagcagg aggctgccga ggcagattta tccaatatgg aaagggtatc tctctcgacg
 360
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 420
 tcagacacca cccaggagcc cccaggatct catgaatatg cggcactgaa agtgtagcaa
 480

gaagacagcc ctggccacta aaagaggggg gatcgtgctg gccaaaggta tcggaaatct
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 ggagatgcag atactgtgtt tccttgctct tcgtccatat caataaaatt aagtttctcg
 600
 tcttaaaaaa aaaaaaa
 617

<210> 2982
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2982
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 His Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys
 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
 65 70 75 80
 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
 85 90 95
 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
 100 105

<210> 2983
 <211> 614
 <212> DNA
 <213> Homo sapiens

<400> 2983
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<210> 2984

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2984

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Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
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<212> DNA

<213> Homo sapiens

<400> 2985

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<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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		20					25						30		
Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
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Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
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Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
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Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile
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Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly
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Leu Glu Asp Met Glu Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu
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985

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<211> 1016

<212> DNA

<213> Homo sapiens

<400> 2987

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<212> PRT

<213> Homo sapiens

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<400> 2990
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 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg
 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
 85 90 95
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
 100 105 110
 Glu Val

<210> 2991
 <211> 980
 <212> DNA
 <213> Homo sapiens

<400> 2991
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 120
 ttggtgggct ccagctgacc cctccagagc ccctgagtgg tggcggctctg cagtcctcag
 180
 tcagcagcag cagacgtcac ccgtcatata gggccattca ctgaagtgtc acctggtgagc
 240
 cttggttggc cagtcctctg ctctgggactg ctgctgggag gcctggggcgc cgcgcacttc
 300
 gcctctgcag tctcgggaca ctctctctgcg tctttacaag cagcatcttg agaggtagac
 360
 agtttccctt cctcactttt gaagaccgca gtctctgtct tggcatctac agtgaggctg
 420
 agcgtttcct tcatgccgcc attcatcact gtctcagtta ccttgtctgt actttctgca
 480
 tctctctctc cgtcagagct ggcttccatg gccacactgc ctgccgcttc tggctgcact
 540
 gccagggcag ccgcactggg agtcagaggg tccatggggt cagtgtggt ttccatttcc
 600
 actggagaat tactccttaa agaatttttt gtgctttctc aggggaagagt gaactctgaa
 660
 aaagaagccc agcccgtctc tttagttggc atcggctcct ctgtgtctca gacatcagat
 720

cccacagaat ccaatggagc accgtgggtt gtttccattg ggacatcaaa gttagctgac
 780
 cagttgggtg gttcactcag gtccacctcc attttatact cegtgttggc actgctgggt
 840
 tcaaacaagt cttgctttgc tccatcttct tcttcagagt ctgtactttc ctactgtct
 900
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 960
 catatatctt cctcatcaga
 980

<210> 2992
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 2992
 Val Val Ala Val Cys Ser Pro Gln Ser Ala Ala Ala Asp Val Thr Arg
 1 5 10 15
 His Thr Gly Pro Phe Thr Glu Val Ser Pro Gly Ala Leu Gly Trp Pro
 20 25 30
 Val Leu Cys Ser Gly Leu Leu Leu Gly Gly Leu Gly Ala Ala His Phe
 35 40 45
 Ala Ser Ala Val Ser Gly His Ser Ser Ala Ser Leu Gln Ala Ala Ser
 50 55 60

<210> 2993
 <211> 687
 <212> DNA
 <213> Homo sapiens

<400> 2993
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 120
 cgatacctca agtttgacat cgagattgga cgtggctcct tcaagacggt gtatcgaggg
 180
 ctagacaccg acaccacagt ggaggtggcc tgggtgtgagc tgcagactcg gaaactgtct
 240
 agagctgagc ggcagcgctt ctcagaggag gtggagatgc tcaaggggct gcagcaccac
 300
 aacatcgctc gcttctatga ttcgtggaag tcggtgctga ggggccaggc ttgcatcggt
 360
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 420
 atgaagccgc gggtccttca gcgctggagc cgccaaatcc tgcgggggact tcatttctta
 480
 cactccccggg ttcttcccat cctgcaccgg gatctcaagt gcgacaatgt ctttatcacg
 540
 ggacctactg gctctgtcaa aatcgggggac ctggggcctgg ccacgctcaa gcgcgcctcc
 600
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 660

tacgatgagg ccgtggacgt gtacgcg
687

<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

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Leu	Glu	Arg	Arg	Arg	Glu	Gln	Glu	Glu	Lys	Glu	Asp	Met	Glu	Thr	Gln
			20					25					30		
Ala	Val	Ala	Thr	Ser	Pro	Asp	Gly	Arg	Tyr	Leu	Lys	Phe	Asp	Ile	Glu
		35					40					45			
Ile	Gly	Arg	Gly	Ser	Phe	Lys	Thr	Val	Tyr	Arg	Gly	Leu	Asp	Thr	Asp
	50					55					60				
Thr	Thr	Val	Glu	Val	Ala	Trp	Cys	Glu	Leu	Gln	Thr	Arg	Lys	Leu	Ser
65					70					75					80
Arg	Ala	Glu	Arg	Gln	Arg	Phe	Ser	Glu	Glu	Val	Glu	Met	Leu	Lys	Gly
				85					90					95	
Leu	Gln	His	Pro	Asn	Ile	Val	Arg	Phe	Tyr	Asp	Ser	Trp	Lys	Ser	Val
			100					105					110		
Leu	Arg	Gly	Gln	Val	Cys	Ile	Val	Leu	Val	Thr	Glu	Leu	Met	Thr	Ser
		115					120					125			
Gly	Thr	Leu	Lys	Thr	Tyr	Leu	Arg	Arg	Phe	Arg	Glu	Met	Lys	Pro	Arg
	130					135					140				
Val	Leu	Gln	Arg	Trp	Ser	Arg	Gln	Ile	Leu	Arg	Gly	Leu	His	Phe	Leu
145					150					155					160
His	Ser	Arg	Val	Pro	Pro	Ile	Leu	His	Arg	Asp	Leu	Lys	Cys	Asp	Asn
				165					170					175	
Val	Phe	Ile	Thr	Gly	Pro	Thr	Gly	Ser	Val	Lys	Ile	Gly	Asp	Leu	Gly
			180				185					190			
Leu	Ala	Thr	Leu	Lys	Arg	Ala	Ser	Phe	Ala	Lys	Ser	Val	Ile	Gly	Thr
		195				200						205			
Pro	Glu	Phe	Met	Ala	Pro	Glu	Met	Tyr	Glu	Glu	Lys	Tyr	Asp	Glu	Ala
	210					215						220			
Val	Asp	Val	Tyr	Ala											
225															

<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

nttttagtagt agtattacat tgtgaatttt attttcaa at ttgatcaata aagatgaaaa
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120
acatatagat tcatttctag ttgattcaat cctatttatg tattttaa at acaaaataat
180
ggccatctgg ctagttccaa cggtagagca tgagactctt aaaatacaaa atacatctta
240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac
300
tttttttattt ttattttttac ttattattatta ttattattat ttttgagatg gagtctcact
360
ctgntcacc caggctggaat acagtgggtg gatctcagct cactgcaacc tccacctccc
420
aggttcaagc gattctcctg cctcagcctc ctgagtagct gggactctga tagatgcctg
480
ccaccacacc cgggtgattt ttgtattttt agtagagacg gggtttcgcc atgttgctca
540
ggctgggtctc gaactcccg a cctcaagtga cttgctcacc ttggcctccc aaagtgctgg
600
gattacaggt gtgagccact gcaccacagc tggcagtcaa ttttaagcct cctatttccc
660
aggtttttagc ttaataatcc tcattagttt ttcagatttt tgtcagtcct gttttggggc
720
tattttgcct tagtgggcct aaacagaata ttaaaataca ttaataatcc atactgagag
780
tagagtataa atgggtttct cactccttag ggacacgagt ggaaacaata catcccatga
840
acacaggtga atgtccctgg ttatccctga gctgggcagt ttcacacaat ctttttttct
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960
ctttgtctcc aaattctttt tctcgggtgct caagaagaat gccctgcttt cctgatecca
1020
ccacgaaaac tcccccaagg atgaagcctt ctccttccag gtttccagag aagcctccgt
1080
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1140
tccgcctttg tggaccatag aactttttct tttcatccag gaagatttct cctttgaaat
1200
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1320
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1380
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1440
ccagggccgc tttctggggc ttggacagaa acacgtctgt gttggcaagc agcaatgcca
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1560
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1620
cgcccgggcg ctaagggggc aaaccgcccg gcccgagggg tcccaggggc gggccccgga
1680
gtacctggag gatatagacc tgaaaacact ggagaaggaa ccaaggactt tcaaagcaaa
1740
ggagctatgg gaaaaaaatg gagctgtgat tatggccgtg cggaggccag gctgtttcct
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1860

ccccctctat gcagtggta
1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

His	Gln	Glu	Arg	Asn	Phe	Thr	Leu	Ala	Ser	Asp	Tyr	Phe	Phe	Ile	Phe
1				5					10					15	
Ile	Phe	Thr	Leu	Leu	Leu	Leu	Leu	Phe	Leu	Arg	Trp	Ser	Leu	Thr	
			20					25					30		
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
			35				40					45			
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
			50			55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70					75					80
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
				85					90					95	
Thr	Pro	Asp	Leu	Lys											
				100											

<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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120
acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccaccctg
180
acccccacac caagggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
actgttcctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcatg
300
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
360
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420
acccaaacag ggtctcctgg ggctacatca aggggtaccc ttaccttgga cacttcaaca
480
acttttatgt cagggaccca ctcaactgca tctcaaagat tttcacactc acagatgacc
540
gctcttatga gtagaactcc tggagatgtg ccatggctaa cccatccctc tggggaagag
600
cccgcctctg cctctttctc actgggttca cctgtcttga cctcattttt ttcgtttttt
660
gccattccc aaaaacctcc accttttttg gttcctgggc aaactttttc cctagggctg
720

gggaaaccca aaatgtgggg ccaaccaga actgaaacat tcccccaat ggacaacctt
 780
 tttgaaaagg gcccttttgc
 800

<210> 2998
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2998
 Thr Gln Met Gly Thr Ile Ser Ala Arg Gln Glu Phe Tyr Ser Ser Tyr
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 Pro Gly Leu Pro Glu Pro Ser Lys Val Thr Ser Pro Val Val Thr Ser
 20 25 30
 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu
 35 40 45
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro
 50 55 60
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser
 65 70 75 80
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met
 85 90 95
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr
 100 105 110
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser
 115 120 125
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly
 130 135 140
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr
 145 150 155 160
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His
 165 170 175
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp
 180 185 190
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu
 195 200 205
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln
 210 215 220
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu
 225 230 235 240
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro
 245 250 255
 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe
 260 265

<210> 2999
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 2999
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acccccttgc cactttggcc ccctccagge tttgggcact gacaagcatg ggaaggaggc
 120
 tgaggggtgc actgaggaca gccagtgct ggctgcagg cacccttaa catgaacagc
 180
 ctggtcacca tgaacagcag caggaggcag acaggctcct ggggtggaaag aagctggtcc
 240
 acagtgaaga cccacctcca agccaggga agcctgaagc ctgggggatg ggtcgccagt
 300
 cccagaaacc gcaagggcaa cttgtggtgc tttccctgg gccacccat ggccgcccac
 360
 ggacgaattg gcatgcactt tctccctct gaggccata aaagcccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc
 480
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 cagggtctcc
 550

<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

Met	Cys	Ser	Ser	Gln	Arg	Gly	Gly	Leu	Gly	Met	Gly	Ser	Thr	Ser
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Val	Gln	Leu	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
		20					25				30			
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Met
		35				40					45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu
	50					55				60				
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro
65					70				75					80
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly
			85					90					95	
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val
		100						105				110		Lys
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser
	115					120					125			Ala
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys
	130					135				140				Trp
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu
145					150					155				160
Trp	Ala	Val	Thr	Ala	Pro	Gly								
				165										

<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

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 120
 gaagtacaga ggttgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa
 180
 ccttgctcag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgagggcat ccagcccagc tcaggccctg ccaccnnca gtaccaaaagc atcattgtca
 300
 ggcaagggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact
 420
 tcgtgtgtgc agacaaagag agccagctgg aggcctatga cttcccagag gtgcagcagg
 480
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttctcccc agagaacact tgccctcag agccaccaa gaaatccagg catggcctgg
 600
 actccatcac atcccaggac atcctaattgg cttccagggtg gcaccagca cagcagaatg
 660
 gctacaagtg cgtggcctgc tgccgcatgt accccaccct ggacttctc aagagccaca
 720
 tcaagagggg cttcagggag ggcttcagct gcaaggtgta ctaccgcaag ctcaaagccc
 780
 tctggagcaa ggagcagaag gcccggtggt gagacaggct ctctccggc agctgccagg
 840
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 900
 agagagatgc caataaagtt agtcacagcc ttctgtccag tctgaggtca cccgcacag
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 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40					45			
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

65					70					75					80
Ala	Leu	Pro	Pro	Xaa	Ser	Thr	Lys	Ala	Ser	Leu	Ser	Gly	Lys	Gly	Tyr
				85					90					95	
Arg	Thr	Gln	Cys	Ser	His	Gln	Thr	Ala	Ala	Trp	Gly	Thr	Pro	Ser	Thr
			100					105						110	
Glu	Arg	Ser													
			115												

<210> 3003
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3003
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 120
 ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
 180
 gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
 240
 ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgctgacat
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 ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgttgtag tggagtcctt
 360
 caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagagggc
 420
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 474

<210> 3004
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 3004
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 Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
 20 25 30
 Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
 35 40 45
 Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
 50 55 60
 Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
 65 70 75 80
 Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
 85 90 95
 Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
 100 105 110
 Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
 115 120 125
 Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 gacaacagtg acaacgtgga actcaagttc aatctggacc agtacgtcaa caagcgggtac
 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcgggaag gactgatccg cgcgcggctg
 180
 cagggctgga aggcggccac cgccccagtc gtcggcttct ttgatgcca cgtcgagttc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcggtg
 300
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gcccatggct acaactgggg cctctgggtgc atgtacatca tccccccgca ggactggctg
 420
 gaccgcggcg acgagtcagc acccatcagg accccagcca tgatcggctg ctccttcgta
 480
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
 540
 ggcgagaacg tagaactggg catgaggggtg tggcagtgtg gcggcagcat ggaggtgctg
 600
 ccctgtctcc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac
 660
 tactacgcca agcgcaacgc cctgcgcacc gccgaggtgt ggatggatga cttcaagtcc
 720
 cacgtgtaca tggcctggaa catccccatg tcgaaccagc ggggtggactt cggggacgtg
 780
 tctgagaggc tggccctgc
 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
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 1 5 10 15
 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65		70		75		80
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Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe						
	100		105		110	
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu						
	115		120		125	
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp						
	130		135		140	
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val						
	145		150		155	
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met						
	165		170		175	
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln						
	180		185		190	
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile						
	195		200		205	
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys						
	210		215		220	
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser						
	225		230		235	
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp						
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<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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<211> 163

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<213> Homo sapiens

<400> 3008

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Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
          35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
          50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
          85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
          100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
          115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
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<212> DNA

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<400> 3009

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660

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<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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			20					25					30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
		35					40					45			
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	50					55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
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Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
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		100					105					110			
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
	115					120					125				
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
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			165					170					175		
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			180					185					190				
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	210					215					220						
Pro	Glu	Val	Leu	Arg	Asp	Glu	Pro	Tyr	Asn	Glu	Lys	Ala	Asp	Val	Phe		
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Ser	Tyr	Gly	Ile	Ile	Leu	Cys	Glu	Ile	Ile	Val	Arg	Ile	Gln	Ala	Asp		
			245					250					255				
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		260					265					270					
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	275					280					285						
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<210> 3011

<211> 3253

<212> DNA

<213> Homo sapiens

<400> 3011

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<211> 870

<212> PRT

<213> Homo sapiens

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			20					25					30		
Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
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His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
	50				55						60				
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Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
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Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
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Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
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<213> Homo sapiens
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<210> 3014

<211> 82
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 35 40 45
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<210> 3015
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 <212> DNA
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<210> 3016
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 <212> PRT
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 35 40 45
 Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

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65					70					75					80			
Arg	Cys	Val	Gly	Gln	Leu	Ser	Ile	Pro	Ser	Pro	Arg	Met	Pro	Trp	Gly			
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<212> DNA

<213> Homo sapiens

<400> 3017

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<211> 104

<212> PRT

<213> Homo sapiens

<400> 3018

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			20					25					30		
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<210> 3019

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3019

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WO 00/58473

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<210> 3020
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 3020
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<210> 3021
 <211> 1008
 <212> DNA
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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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			20					25					30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40					45			
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
		50				55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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<210> 3024

<211> 347
 <212> PRT
 <213> Homo sapiens

<400> 3024

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Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
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Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
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Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
 85          90          95
Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
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His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
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Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
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Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
 245         250         255
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 275         280         285
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 290         295         300
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<210> 3025
 <211> 1370
 <212> DNA
 <213> Homo sapiens

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<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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 35 40 45
 Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50 55 60
 Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
 65 70 75 80
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 85 90 95
 Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
 100 105 110
 Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50					55					60				
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Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
				85					90					95	
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
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Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170						175	
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180					185					190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210					215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
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Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

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 His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
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 Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
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 Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
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<210> 3029
 <211> 344
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 344

<210> 3030
 <211> 114
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
 50 55 60
 Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
 65 70 75 80
 Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
 85 90 95
 Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
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 Lys Asn

<210> 3031
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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240
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300
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360
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<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

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			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
		35					40					45			
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
	50					55					60				
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
65					70				75					80	
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
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Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
		100						105				110			
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
	115						120					125			
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
	130					135					140				
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
145					150				155					160	
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu
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185

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 <211> 821
 <212> DNA
 <213> Homo sapiens

<400> 3033
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 300
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 360
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 420
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 660
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 821

<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
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 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
 50 55 60
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
 65 70 75 80
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

				85						90					95				
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130					135				140								
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145					150					155					160				
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165						170					175					
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180						185				190							
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
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<210> 3035

<211> 878

<212> DNA

<213> Homo sapiens

<400> 3035

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<210> 3036
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 3036
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 20 25 30
 Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr
 35 40 45
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
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 Pro
 65

<210> 3037
 <211> 3538
 <212> DNA
 <213> Homo sapiens

<400> 3037
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<210> 3038

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
		35					40					45			
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Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
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Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
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Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

			100					105					110			
Leu	Lys	Met	Leu	Leu	Ser	Asp	Phe	Ser	His	His	His	Ile	Glu	Met	Ala	
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Cys	Thr	Leu	Leu	Glu	Thr	Cys	Gly	Arg	Phe	Leu	Phe	Arg	Ser	Pro	Glu	
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Ser	His	Leu	Arg	Thr	Ser	Val	Leu	Leu	Glu	Gln	Met	Met	Arg	Lys	Lys	
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				165					170					175		
Tyr	Tyr	Tyr	Cys	Asn	Pro	Pro	Pro	Ala	Glu	Lys	Thr	Val	Lys	Lys	Lys	
			180					185					190			
Arg	Pro	Pro	Leu	Gln	Glu	Tyr	Val	Arg	Lys	Leu	Leu	Tyr	Lys	Asp	Leu	
		195					200					205				
Ser	Lys	Val	Thr	Thr	Glu	Lys	Val	Leu	Arg	Gln	Met	Arg	Lys	Leu	Pro	
	210					215					220					
Trp	Gln	Asp	Gln	Glu	Val	Lys	Asp	Tyr	Val	Ile	Cys	Cys	Met	Ile	Asn	
225					230					235					240	
Ile	Trp	Asn	Val	Lys	Tyr	Asn	Ser	Ile	His	Cys	Val	Ala	Asn	Leu	Leu	
				245					250					255		
Ala	Gly	Leu	Val	Leu	Tyr	Gln	Glu	Asp	Val	Gly	Ile	His	Val	Val	Asp	
			260					265					270			
Gly	Val	Leu	Glu	Asp	Ile	Arg	Leu	Gly	Met	Glu	Val	Asn	Gln	Pro	Lys	
		275					280					285				
Phe	Asn	Gln	Arg	Arg	Ile	Ser	Ser	Ala	Lys	Phe	Leu	Gly	Glu	Leu	Tyr	
	290					295					300					
Asn	Tyr	Arg	Met	Val	Glu	Ser	Ala	Val	Ile	Phe	Arg	Thr	Leu	Tyr	Ser	
305					310					315					320	
Phe	Thr	Ser	Phe	Gly	Val	Asn	Pro	Asp	Gly	Ser	Pro	Ser	Ser	Leu	Asp	
				325					330					335		
Pro	Pro	Glu	His	Leu	Phe	Arg	Ile	Arg	Leu	Val	Cys	Thr	Ile	Leu	Asp	
			340					345					350			
Thr	Cys	Gly	Gln	Tyr	Phe	Asp	Arg	Gly	Ser	Ser	Lys	Arg	Lys	Leu	Asp	
		355					360					365				
Cys	Phe	Leu	Val	Tyr	Phe	Gln	Arg	Tyr	Val	Trp	Trp	Lys	Lys	Ser	Leu	
	370					375					380					
Glu	Val	Trp	Thr	Lys	Asp	His	Pro	Phe	Pro	Ile	Asp	Ile	Asp	Tyr	Met	
385					390					395					400	
Ile	Ser	Asp	Thr	Leu	Glu	Leu	Leu	Arg	Pro	Lys	Ile	Lys	Leu	Cys	Asn	
				405					410					415		
Ser	Leu	Glu	Glu	Ser	Ile	Arg	Gln	Val	Gln	Asp	Leu	Glu	Arg	Glu	Phe	
			420					425					430			
Leu	Ile	Lys	Leu	Gly	Leu	Val	Asn	Asp	Lys	Asp	Ser	Lys	Asp	Phe	Met	
		435					440					445				
Thr	Glu	Gly	Glu	Asn	Leu	Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	
	450					455										

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 Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp
 580 585 590
 Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe
 595 600 605
 Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp
 610 615 620
 Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met' Lys Lys Leu
 625 630 635 640
 Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met
 645 650 655
 Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu
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<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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 1836

<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35				40					45				
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50				55					60					
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65				70				75						80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

				85						90					95				
Leu	Arg	Gln	Leu	Gln	Thr	Asp	Leu	Arg	Lys	Glu	Lys	Gln	Asp	Lys	Ala				
			100																
Gly	Leu	Gln	Ala	Glu	Val	Gln	His	Leu	Arg	Gln	Asp	Asn	Met	Arg	Leu				
		115					120						125						
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<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro	20	25	30	
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His	35	40	45	
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met	50	55	60	
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu	65	70	75	80
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu	85	90	95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile	100	105	110	
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly	115	120	125	
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr	130	135	140	
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val	145	150	155	160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr	165	170	175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser	180	185	190	
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr	195	200	205	
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp	210	215	220	
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln	225	230	235	240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val	245	250	255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val	260	265	270	
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg				

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 290 295 300
 Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
 305 310 315 320
 Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
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 Val Pro Glu Pro Arg Ile Ile Met
 355 360

<210> 3043
 <211> 394
 <212> DNA
 <213> Homo sapiens

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 180
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 240
 ccagcctttg tttggggact cggaggcaga gtagacagtt acccttacct ctgggttggg
 300
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 394

<210> 3044
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 3044
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 35 40 45
 Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
 50 55 60
 Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
 65 70 75 80
 Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
 85 90 95
 Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
 100 105 110
 Lys Glu Ile

115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

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 120
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 360
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 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
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 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
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 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 240
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 360
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<210> 3048
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3048
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 20 25 30
 Leu Val Glu Ser Gly Ile Gln Phe Met Asp Glu Pro Glu Met Ala Val
 35 40 45
 Phe Leu Gln Asn Ala Lys Thr Leu Leu Lys Lys Ile Ser Glu Ala Ser
 50 55 60
 Lys Ala Phe Gln Met Glu Lys Ile Glu His Gly Tyr Glu Asn Met Asn
 65 70 75 80
 His Phe Thr Val Asn Leu Asn Arg Glu Glu Lys Ile Ile Arg Glu Ile
 85 90 95
 Asp Phe Tyr Arg Glu Asp Glu Asp Glu Glu Glu Glu Gly Gly Glu
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 Gly Glu Lys Glu Glu Lys Glu Lys Trp Glu
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<210> 3049
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 3049
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 180
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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50				55					60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75					80
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135						140			
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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tcctcggcca ccgtcgcaca acaggcctcc tcctccccag tccctggagg gactccgaca
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 720
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<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

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			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35					40					45			
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
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<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 180
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 240
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 300

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360
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420
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1920

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 2520
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<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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Glu	Lys	Pro	Glu	Glu	Pro	Pro	Thr	Ser	Asn	Glu	Cys	Leu	Glu	Asp	Ile
			20					25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65					70					75				80	
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
			85						90					95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
		115					120					125			
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145					150					155				160	
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
				165					170					175	
Leu	Arg	Asn	Leu	Asp	Ser	Arg	Gln	Cys	Arg	Glu	Thr	His	Lys	Ile	Ala

			180					185					190				
Val	Phe	Tyr	Val	Ala	Glu	Gly	Gln	Glu	Asp	Lys	His	Ser	Ile	Leu	Thr		
			195				200					205					
Asn	Thr	Gly	Gly	Ser	Gln	Ala	Tyr	Glu	Asp	Phe	Val	Ala	Gly	Leu	Gly		
			210			215					220						
Trp	Glu	Val	Asn	Leu	Thr	Asn	His	Cys	Gly	Phe	Met	Gly	Gly	Leu	Gln		
225					230					235					240		
Lys	Asn	Lys	Ser	Thr	Gly	Leu	Thr	Thr	Pro	Tyr	Phe	Ala	Thr	Ser	Thr		
				245					250						255		
Val	Glu	Val	Ile	Phe	His	Val	Ser	Thr	Arg	Met	Pro	Ser	Asp	Ser	Asp		
			260					265					270				
Asp	Ser	Leu	Thr	Lys	Lys	Leu	Arg	His	Leu	Gly	Asn	Asp	Glu	Val	His		
		275					280					285					
Ile	Val	Trp	Ser	Glu	His	Thr	Arg	Asp	Tyr	Arg	Arg	Gly	Ile	Ile	Pro		
	290					295					300						
Thr	Glu	Phe	Gly	Asp	Val	Leu	Ile	Val	Ile	Tyr	Pro	Met	Lys	Asn	His		
305					310					315					320		
Met	Phe	Ser	Ile	Gln	Ile	Met	Lys	Lys	Pro	Glu	Val	Pro	Phe	Phe	Gly		
				325					330					335			
Pro	Leu	Phe	Asp	Gly	Ala	Ile	Val	Asn	Gly	Lys	Val	Leu	Pro	Ile	Met		
			340					345				350					
Val	Arg	Ala	Thr	Ala	Ile	Asn	Ala	Ser	Arg	Ala	Leu	Lys	Ser	Leu	Ile		
	355					360					365						
Pro	Leu	Tyr	Gln	Asn	Phe	Tyr	Glu	Glu	Arg	Ala	Arg	Tyr	Leu	Gln	Thr		
	370					375					380						
Ile	Val	Gln	His	His	Leu	Glu	Pro	Thr	Thr	Phe	Glu	Asp	Phe	Ala	Ala		
385					390					395					400		
Gln	Val	Phe	Ser	Pro	Ala	Pro	Tyr	His	His	Leu	Pro	Ser	Asp	Ala	Asp		
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His

<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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 180
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 240
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 300
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 420
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<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
	35						40				45				
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50					55				60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65					70					75				80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
				85				90					95		
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
			100				105						110		
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
		115					120						125		
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
	130					135					140				
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150					155					160
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
				165				170						175	
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
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<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

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180
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<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

Phe	Gln	Leu	Pro	Pro	Thr	Leu	Val	Thr	Ser	Phe	Glu	Gly	Lys	His	Gly
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			20					25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
			35				40					45			
Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
	50					55					60				
Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65					70					75				80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
				85					90					95	
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
			100					105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
			115				120					125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Gly	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg
			130				135				140				
Ala	Leu	Trp	Gln	Gly	Arg	Ala	Leu	Arg	Ile	Pro	Pro	Val	Gly	Pro	Ser
145					150				155					160	
Ile	Leu	His	Cys	Arg	Val	Leu	His	Val	Asp	Tyr	Ala	Leu	Lys	Val	Cys
				165					170					175	
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Leu	Glu	Leu	Pro	Leu	Val
			180					185					190		
Ile	Gly	Thr	Ile	Pro	Leu	His	Pro	Phe	Gly	Ser	Arg	Ser	Ser	Ser	Val

	195						200						205						
Gly	Ser	His	Ala	Ser	Phe	Leu	Leu	Asp	Trp	Arg	Leu	Gly	Ala	Leu	Pro				
	210						215					220							
Glu	Arg	Pro	Glu	Ala	Pro	Pro	Glu	Tyr	Ser	Glu	Val	Val	Ala	Asp	Thr				
225						230				235					240				
Glu	Glu	Ala	Ala	Leu	Gly	Gln	Ser	Pro	Phe	Pro	Leu	Pro	Gln	Asp	Pro				
				245					250						255				
Asp	Met	Ser	Leu	Glu	Gly	Pro	Phe	Phe	Ala	Tyr	Ile	Gln	Glu	Phe	Arg				
		260						265						270					
Tyr	Arg	Pro	Pro	Pro	Leu	Tyr	Ser	Glu	Glu	Asp	Pro	Asn	Pro	Leu	Leu				
	275						280					285							
Gly	Asp	Met	Arg	Pro	Arg	Cys	Met	Thr	Cys										
	290					295													

<210> 3059
 <211> 1411
 <212> DNA
 <213> Homo sapiens

<400> 3059
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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 720
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 780
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 960
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 1020

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 1140
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 1200
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 1260
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 1380
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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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			20					25					30		
Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser
		35					40					45			
Arg	Ser	Trp	Ser	Arg	Asp	Leu	Gln	Pro	Arg	Ser	His	Ser	Tyr	Asp	Arg
	50				55					60					
Arg	Arg	Arg	His	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Tyr	Gly	Ser	Arg	Arg
65				70					75					80	
Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
			85					90						95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
			100					105					110		
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg
		115					120					125			
Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys
	130					135					140				
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His
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			165					170						175	
Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu
			180					185					190		
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu
	195					200						205			
Glu	Glu	Ala	Lys	Arg	Arg	Lys	Glu	Glu	Asp	Gln	Ala	Thr	Leu	Val	Glu
	210					215					220				
Gln	Val	Lys	Arg	Val	Lys	Glu	Ile	Glu	Ala	Ile	Glu	Ser	Asp	Ser	Phe
225				230					235					240	
Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu
			245					250					255		
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala

				260					265					270		
Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile	
		275						280				285				
Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn	
		290				295					300					
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu	
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<210> 3061

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3061

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120	gcttccgtat	cacagggggc	agggatttcc	acacgcccat	catggtgact
180	agcggggcaa	agccaaggac	gctgacctcc	ggcctggaga	cataatcgtg
240	gggaaagcgc	ggagggcatg	ctgcatgccg	aggcccagag	caagatccgc
300	cgccctgcg	gctgcagctg	gaccggtctc	aggctacgtc	tccagggcag
360	acagctcctt	ggaagtgtg	gcgactcgct	tccagggctc	cgtgaggaca
420	gtcagtcctc	cttaaggctc	tctactcca	gcccacctc	cctcagcccc
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540	cttccagagt	ctggcatgtt	ccccgggcct	ccccgctgct	gaccgcctgt
600	ccgccctgga	agccgacacg	cggcctcggc	gccgctggcg	actcggcggt
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900	agggccctgg	ccaccctctc	caagctccac	acttgtgaga	agtgacgtac
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1080	gagaagcatg	cccgccagcg	ctactccgca	cctgccaccc	tcagctctcg
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1554

<210> 3062
<211> 146
<212> PRT
<213> Homo sapiens

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20 25 30
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35 40 45
Gly Gly Thr Pro Ala Phe Leu Pro Ser Ser Leu Ser Pro Gln Ser Ser
50 55 60
Leu Pro Ala Ser Arg Ala Leu Ala Thr Pro Pro Lys Leu His Thr Cys
65 70 75 80
Glu Lys Cys Ser Thr Ser Ile Ala Asn Gln Ala Val Arg Ile Gln Glu
85 90 95
Gly Arg Tyr Arg His Pro Gly Cys Tyr Thr Cys Ala Asp Cys Gly Leu
100 105 110
Asn Leu Lys Met Arg Gly His Phe Trp Val Gly Asp Glu Leu Tyr Cys
115 120 125
Glu Lys His Ala Arg Gln Arg Tyr Ser Ala Pro Ala Thr Leu Ser Ser
130 135 140
Arg Ala
145

<210> 3063
<211> 386
<212> DNA
<213> Homo sapiens

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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			20					25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
			35				40					45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55					60				
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70					75				80	
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln	Glu
				85				90					95		
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
			100					105					110		
Lys	Asp	Ala	Ala	Glu	Ala	Thr	Leu	Thr	Trp	Tyr	Gly	Ser	Asp	Arg	Thr
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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 240
 gtcgcgcccc agctggacga gctgcgccctg gagctggacc gctgcgccct ggagaggatg
 300
 gaccgcatcg agaaggagcg caagcaccag aaggagctgg agctggtgga ggatgtgtgg
 360
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 420
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 480

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540
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2100

tgca
2104

<210> 3066
<211> 183
<212> PRT
<213> Homo sapiens

<400> 3066
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35 40 45
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
50 55 60
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
65 70 75 80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
85 90 95
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn
100 105 110
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln
115 120 125
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys
130 135 140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
145 150 155 160
Gly Gln Trp Ala Asn Thr His Arg Asp Asp Gly Tyr Thr Glu Gln Gly
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Gln Glu Ala Leu Gln His Leu
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<210> 3067
<211> 645
<212> DNA
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<400> 3067
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120
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240
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360
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420

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 480
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 645

<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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Pro	Pro	Ala	Ala	Met	Ser	Gly	Ser	Pro	Ala	Pro	Lys	Ala	Gly	Tyr	Ala
		20						25					30		
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
		35					40					45			
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
	50					55					60				
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
65					70					75				80	
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu	
			85					90					95		
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
			100					105					110		
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
		115					120					125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
	130					135				140					
Pro	Pro	Pro	Gly	Ala	Gly	Arg	Gly	Ser	Glu	His	Arg	Ser	Ala	Pro	Gly
145					150				155					160	
Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ala	Ser	Arg	Pro	Pro
			165					170					175		
Ser	Pro	Ala	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro	
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<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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 180

ctggttttgt taggagtatt ttgatttttc tatttttacg ctgggaaaaa aattaaaaca
240
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300
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360
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420
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480
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540
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720
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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
           35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
           50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
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Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
           100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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780

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
			35				40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
			50			55					60				
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70				75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
				85				90						95	
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105						110	
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

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      130              135              140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
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Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
      210              215              220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
      225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro	
	50					55				60					
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70					75					80
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
				85					90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105						110	
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145					150					155				160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170						175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180					185					190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
	195					200					205				
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215				220					
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225					230					235				240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245					250					255		
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
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<210> 3078
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 3078
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 35 40 45
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 50 55 60
 Ala Val Thr Leu Val Ser Ala Pro Arg Pro Asp Ser Arg His His Ser
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 Gln Ser Ala Leu Ala Ala Glu Ala Arg Glu Thr Arg Arg Gln Glu Leu
 100 105 110
 Leu Glu Lys Ile Thr Glu Gly Gln Ala Ala Lys Lys Gln Lys Leu Glu
 115 120 125
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 130 135 140
 Ala Lys Glu Asp Glu Thr Ser Asp Gly Gln Ala Ser Gly Glu Gln Glu
 145 150 155 160
 Glu Ala Gly Pro Ser Ser Ser Gln Ala Gly Pro Ser Asn Gly Val Ala
 165 170 175
 Pro Leu Pro Arg Ser Ala Leu Leu Val Gln Leu Ala Thr Ala Arg Pro
 180 185 190
 Arg Pro Val Lys Ala Arg Pro Leu Asp Trp Arg Val Gln Ser Lys Asp
 195 200 205
 Trp Pro His Ala Gly Arg Pro Ala His Glu Leu Arg Tyr Ser Ile Tyr
 210 215 220
 Arg Asp Leu Trp Glu Arg Gly Phe Phe Leu Ser Ala Ala Gly Lys Phe
 225 230 235 240
 Gly Gly Asp Phe Leu Val Tyr Pro Gly Asp Pro Leu Arg Phe His Ala
 245 250 255
 His Tyr Ile Ala Gln Cys Trp Ala Pro Glu Asp Thr Ile Pro Leu Gln
 260 265 270
 Asp Leu Val Ala Ala Gly Arg Leu Gly Thr Ser Val Arg Lys Thr Leu
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 <211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

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Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala 45	Pro	Glu	Pro
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Ile	Gly	Ile	Ile 115	Val	Gly	His	Ile	Gln 120	Ala	Ser	Val	Pro 125	Ala	Ser	Ser
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Ser 145	Met	Ala	Leu	Pro	Ser 150	Gly	Gln	Val	Cys	His 155	Asp	Gln	Gln	Arg	Leu 160
Glu	Val	Ile	Phe 165	Ala	Asp	Leu	Ala	Arg 170	Arg	Lys	Asp	Asp	Ala	Gln	Gln
Arg	Ser	Trp	Ala 180	Leu	Tyr	Glu	Asp 185	Glu	Gly	Val	Ile 190	Arg	Cys	Tyr	Leu
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Lys	Met 210	Cys	Lys	Arg	Asn	Glu 215	Phe	Glu	Ser	Val	Leu 220	Ala	Leu	Val	Ala
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Cys	Phe	Gly	Ala 245	Met	Cys	Ser	Leu	Asp 250	Ala	Ala	Ile	Ile	Ser	Thr 255	Leu
Val	Ser	Ser	Val 260	Leu	Pro	Val	Glu	Leu 265	Ala	Arg	Asp	Met	Gln	Thr	Asp
Thr	Gln	Asp 275	His	Gln	Lys	Leu	Cys 280	Tyr	Ser	Ala	Leu 285	Ile	Leu	Ala	Met
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Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met				
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Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu				
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Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His				
	370		375	380
Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe				
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Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala				
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<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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600

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 720
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 780
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 840
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 900
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 960
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 1020
 aggctggaca gcatggccat cgaggccctg cccttcagg actgcctctg ccagatgctg
 1080
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 1140
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 1200
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 1260
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 1380
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 1440
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 1740
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 1800
 accggcggt cccgggcgc tcagtcctgg acaggagcct ccaccacagg ctgtgtgaat
 1860
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 1902

<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr
 1 5 10 15
 Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

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      20      25      30
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      35      40      45
Cys His Asp Asp Ala Ala Lys Phe Val His Leu Leu Met Ser Pro Gly
      50      55      60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val
      65      70      75      80
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe
      85      90      95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val
      100      105      110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser
      115      120      125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn
      130      135      140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
      145      150      155      160
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp
      165      170      175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp
      180      185      190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu
      195      200      205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu
      210      215      220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp
      225      230      235      240
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr
      245      250      255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro
      260      265      270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr
      275      280      285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn
      290      295      300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu
      305      310      315      320
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro
      325      330      335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu
      340      345      350
Val Ala Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala
      355      360      365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu
      370      375      380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
      385      390      395      400
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
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<210> 3083

<211> 610

<212> DNA

<213> Homo sapiens

<400> 3083

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 120
 gactgggcag gccgggcccg ggcactggtg ggtgacagtc atacttcgtg gagcccagcg
 180
 agcatcccgg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg
 240
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 300
 tacgaccggg aggtccacct gcgttgtgag ctctcaccgg gctactacct ggctgtcccc
 360
 agcaccttcc tgaaggacgc gccaggggag ttcctgctcc gagtcttctc taccgggcga
 420
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt
 480
 ccaaggcagg atttgggcac tttccctctg tgggtggcag gtgtccatgt gggaaactgag
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 600
 gcagtggcca
 610

<210> 3084

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3084

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Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
		35				40					45				
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
	50				55					60					
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65				70					75					80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
			85					90						95	
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
		100					105					110			
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
		115					120					125			
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
	130					135					140				

<210> 3085

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 3085

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120
caaaagataa gaaaatggaa attaaggga atctgttcag caacaaagat cttgaggaat
180
tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg
240
agctcttcca gtgcatgtac ttcaaagaca aagaccctgc caccgaggag cgttgcatat
300
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420
atagctgttc tgaatggaaa ccaggatccc ttcaacgatt tcaaaacaaa attacctcta
480
ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat
540
ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac
600
catacaagat accaaatata gaacttattc atcagagttc ccccttgctg aagagtgagt
660
tagtgaaaga agtaactaaa tctgtggaag aagctcagct tgcccaagaa gtcaaagtaa
720
acatcattca ggaggaatat caagaatatc gccaaacaaa gggaaggagc ctatacacac
780
ttctagagga gatacgggac ctagctctcc tggatgtttc aaacaattat ggaatatgag
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aggctcttac ttcactaaga gctgtcatat gtgaatgttt tacagtcttt tcaaacttaa
900
catttaatgt gtgtcactca gtgctctagt cgatcaggac tgggtagcta tttcgcatat
960
atgtanaatg ttctcagccg ggcacggtgg ctcacgcctg taaccccagc actttggggag
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<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

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Met Cys Val Thr Gln Cys Ser Ser Arg Ser Gly Leu Gly Ser Tyr Phe
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Ala Tyr Met Xaa Asn Val Leu Ser Arg Ala Arg Trp Leu Thr Pro Val
20           25           30
Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu
35           40           45
Ile Glu Thr Ile Leu Ala Asn Thr Val Lys
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<210> 3087
<211> 2329
<212> DNA
<213> Homo sapiens

<400> 3087
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gtggaggtgg agccgcccc agatcggcca gtccgagcgt gccggacaca gcagccggaa
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240
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420
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480
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720
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780
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960
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1020
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1080
gcaagaaagt ggtggacgac ctcttgacc agatcacagg cggagaccac tctaggacgc
1140
tcttcagct gaagcagaga agaaatgttc ccatgaagcc tccagatgaa gccaagggtg
1200
gggacaccct aggagacagc agcagctctg ttctggagtt catgtcgatg aagtcctatc
1260
ccgacgtttc tgtggatata tccatgctca gctctctggg gaaggatgag aaggagctgg
1320
accctgacga cagccatttg aacttggatg agacgacgaa gtcctgcag gacctgcacg
1380
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1440

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 1920
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 2160
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 2220
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 2280
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 2329

<210> 3088
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3088
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 Lys Lys Arg Lys Arg Glu Arg Glu His Cys Asp Thr Glu Gly Glu Ala
 20 25 30
 Asp Asp Phe Asp Pro Gly Lys Lys Val Glu Val Glu Pro Pro Pro Asp
 35 40 45
 Arg Pro Val Arg Ala Cys Arg Thr Gln Gln Pro Glu Met Glu Arg Thr
 50 55 60
 His Ile Gln Gln Leu Leu Glu His Phe Leu Arg Gln Leu Gln Arg Lys
 65 70 75 80
 Asp Pro His Gly Phe Phe Ala Phe Pro Val Thr Asp Ala Ile Ala Pro
 85 90 95
 Gly Tyr Ser Met Ile Ile Lys His Pro Met Asp Phe Gly Thr Met Lys
 100 105 110
 Asp Lys Ile Val Ala Asn Glu Tyr Lys Ser Val Thr Glu Phe Lys Ala
 115 120 125
 Asp Phe Lys Leu Met Cys Asp Asn Ala Met Thr Tyr Asn Arg Pro Asp

130	135	140
Thr Val Tyr Tyr Lys	Leu Ala Lys Lys Ile	Leu His Ala Gly Phe Lys
145	150	155
Met Met Ser Lys	Gln Ala Ala Leu Leu Gly	Asn Glu Asp Thr Ala Val
165	170	175
Glu Glu Pro Val	Pro Glu Val Val Pro	Val Gln Val Glu Thr Ala Lys
180	185	190
Lys Ser Lys Lys	Pro Ser Arg Glu Val	Ile Ser Cys Met Phe Glu Pro
195	200	205
Glu Gly Asn Ala	Cys Ser Leu Thr Asp	Ser Thr Ala Glu Glu His Val
210	215	220
Leu Ala Leu Val	Glu His Ala Ala Asp	Glu Ala Arg Asp Arg Ile Asn
225	230	235
Arg Phe Leu Pro	Gly Gly Lys Met Gly	Tyr Leu Lys Arg Asn Gly Asp
245	250	255
Gly Ser Leu Leu	Tyr Ser Val Val Asn	Thr Ala Glu Pro Asn Ala Asp
260	265	270
Glu Glu Glu Thr	His Pro Val Thr	
275	280	

<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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ggagacgtgc tggacacact ggaggcgctg gggataaaag gaccattggtt agaagagcaa
120

gcccttaciaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
180

tggttaggct ctcaaataaa atcattatgc aacttggaag aaagtatcac gtctgctggg
240

agagatgacc tagagagctt ccagcttgag ataagtgggt ttttaaaga gatggcctgt
300

ccatactcgg tactcgtctc aggagacatt aaagagcgcc tcacaaaga ggatgactgc
360

ttgaaacttc tgttggtttt aagtacagaa cttcaagctt tacaatatatt acagaacaag
420

aaacataaaa attctcaatt agataaaaat agtgaagttt atcaggaagt tcaagctatg
480

tttgatacac ttggtatacc caagtcaaca acttctgaca ttccgcatat gctaaaccaa
540

gtggaatcaa aggtgaaaga tattctctca aaggtccaga aaaatcatgt gggaaaacca
600

ctactgaaaa tggatttaaa ttcagaacag gcggaacaac tggaaagaat caatgatgct
660

ctttcctgtg aatatgagtg ccgcccacga atgttaatga aacgattaga tgtgactgta
720

ca

722

<210> 3090

<211> 240
 <212> PRT
 <213> Homo sapiens

<400> 3090
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 Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
 20 25 30
 Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
 35 40 45
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
 50 55 60
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
 65 70 75 80
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
 85 90 95
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
 100 105 110
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Leu Phe Leu Ser
 115 120 125
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
 130 135 140
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
 145 150 155 160
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
 165 170 175
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
 180 185 190
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
 195 200 205
 Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
 210 215 220
 Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
 225 230 235 240

<210> 3091
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 3091
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 120
 cccagggcga ccccttctgc caagtgtccc aaaatgattg ctaaatgcct ggctccccca
 180
 ctctttgact ccattctcttg gttccctctt tctgctgccg gctccccga ctcttccctg
 240
 gggactcctt tttgtgtccc ccttctcccc tgcccctact gccaggcaga tcccccttc
 300
 ttccataccc atccctgcct cctgctcgg ccg
 333

<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
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 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
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 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
 85 90 95
 Phe Pro Ser Ala Pro Phe Thr Arg
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<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3093
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 120
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 180
 accatggtga agctgggctg cagcttctct gggaagccag gtaaagaccc tggggaccag
 240
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 300
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 360
 gaccagcaga atttcctga cctggagggc cagaggctga actgcagcca cccagaggaa
 420
 gggcgaggc tgcccaccgc acggatgac gccttcgcca tggcgctact gggctgcgtg
 480
 ctgatcatgt acaaggccat ctggtacgac cagttcacct gccccgacgg cttcctgctg
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 600
 cgccaccgca gcatcctggc ggccatcggg gcctaccgc tgagccgcaa gcacggcacg
 660
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 720

<210> 3094

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3094

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Gly Asp Gln Asp Gly Ala Ala Met Asp Ser Val Pro Leu Ile Ser Pro
      20           25           30
Leu Asp Ile Ser Gln Leu Gln Pro Pro Leu Pro Asp Gln Val Val Ile
      35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
      50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
      85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
      100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
      115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
      130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
      165          170          175
Lys Gly Pro

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<210> 3095

<211> 519

<212> DNA

<213> Homo sapiens

<400> 3095

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120
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180
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240
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480
cacggagaca tcctctccat gggatgatgc cagcggccg
519

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<210> 3096
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3096
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Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
	85	90
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		95
	100	105
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
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Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
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<210> 3101

<211> 2623

<212> DNA

<213> Homo sapiens

<400> 3101

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<210> 3102
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 <213> Homo sapiens

<400> 3102

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Glu	Gly	Thr	Asp	Trp	Ser	Gly	Cys	Thr	Leu	Gln	Glu	Phe	Met	Asp	Cys
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Pro	Tyr	Asn	Leu	Ala	Asn	Asn	Arg	Gln	Val	Arg	Met	Leu	Ala	Asp	Leu
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Thr	Arg	Ala	Gly	Gly	Val	Glu	Val	Asp	Glu	Asp	Thr	Ile	Arg	Arg	Ile
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Glu	Glu	Leu	Asn	Asp	Leu	Asp	Met	Gln	Leu	Tyr	Asp	Tyr	Ala	Lys	Asp
		340					345						350		
Leu	Phe	Gln	Gln	Arg	Tyr	Gln	Tyr	Lys	Arg	Gln	Leu	Glu	Arg	Arg	Glu
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 <212> DNA
 <213> Homo sapiens

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<210> 3104
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 35 40 45
 Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro
 50 55 60
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val
 65 70 75 80
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro
 85 90 95
 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val
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<210> 3105
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<210> 3106

<211> 1366

<212> PRT

<213> Homo sapiens

<400> 3106

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Lys	Ser	Lys	Ile	Gly	Lys	Gln	His	Pro	Asp	Arg	Val	Val	Glu	Thr	Ser
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Pro	Ser	Asp	Ser	Gly	Ala	Leu	Ser	Ala	Leu	Gln	Leu	Glu	Ala	Ile	Thr
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Tyr	Ala	Cys	Gln	Gln	His	Glu	Val	Leu	Leu	Pro	Ser	Gly	Gln	Arg	Ala
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Gly	Phe	Leu	Ile	Gly	Asp	Gly	Ala	Gly	Val	Gly	Lys	Gly	Arg	Thr	Val
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Trp	Phe	Ser	Val	Ser	Asn	Asp	Leu	Lys	Tyr	Asp	Ala	Glu	Arg	Asp	Leu
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Ser	Ala	Leu	Ile	Gly	Glu	Ser	Gln	Ala	Gly	Gly	Gln	His	Arg	Thr	Arg
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Leu	Arg	Gln	Ile	Leu	Asp	Trp	Cys	Gly	Glu	Ala	Phe	Glu	Gly	Val	Ile
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Ile	Val	Ala	Met	Asp	Met	Lys	Val	Ser	Gly	Met	Tyr	Ile	Ala	Arg	Gln
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Thr	Gly	Glu	Ala	Arg	Thr	Arg	Glu	Val	Leu	Gly	Glu	Asn	Asp	Gly	His	
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Thr	Glu	Ser	Asp	Pro	Gly	Leu	Asp	Ser	Asp	Phe	Asn	Ser	Ser	Pro	Glu	
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Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys						
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Ser Leu Ala Leu Thr Gly Pro Tyr Asp Gly Phe Tyr Leu Ser Tyr Lys						
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Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly						
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Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu						
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Ala Glu Ala Phe Pro Pro Pro His Phe Ser Phe Pro Ala Pro Leu						
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Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe						
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Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro						
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Ser Glu Gly Ala Leu Gly Glu Gly Ala Gly Ala Gly Gly Ala Ala Gly						
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<211> 2102

<212> DNA

<213> Homo sapiens

<400> 3107

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<211> 517

<212> PRT

<213> Homo sapiens

<400> 3108

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Val	Trp	Arg	Pro	Glu	Gly	Glu	Pro	Arg	Phe	Tyr	Pro	Asp	Glu	Glu	Gly
			20					25					30		
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35					40					45			
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
	50					55					60				
Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65					70					75				80	
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
				85					90					95	
Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
			100					105					110		
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
		115					120					125			
Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
	130					135					140				
Ala	Glu	Gly	Ala	Asp	Gln	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asn	Tyr
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Thr	Trp	Pro	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Tyr	Ala	Cys	Gln	Ala
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Ala	Gly	Val	Ser	Val	His	Val	Cys	Asn	Glu	His	Arg	Tyr	Gly	Tyr	Met

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Asn Val Pro Val Lys Ser His Gln Gly Leu Glu Asp Glu Arg Val Asn
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      225      230      235      240
Phe Asp Glu Val Phe Val Ile Ser Leu Ala Arg Arg Pro Asp Arg Arg
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Glu Arg Met Leu Ala Ser Leu Trp Glu Met Glu Ile Ser Gly Arg Val
      260      265      270
Val Asp Ala Val Asp Gly Trp Met Leu Asn Ser Ser Ala Ile Arg Asn
      275      280      285
Leu Gly Val Asp Leu Leu Pro Gly Tyr Gln Asp Pro Tyr Ser Gly Arg
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Thr Leu Thr Lys Gly Glu Val Gly Cys Phe Leu Ser His Tyr Ser Ile
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Trp Glu Glu Val Val Ala Arg Gly Leu Ala Arg Val Leu Val Phe Glu
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Asp Asp Val Arg Phe Glu Ser Asn Phe Arg Gly Arg Leu Glu Arg Leu
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Met Glu Asp Val Glu Ala Glu Lys Leu Ser Trp Asp Leu Ile Tyr Leu
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Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu
      370      375      380
Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala
      385      390      395      400
Leu Arg Leu Ala Gly Ala Arg Lys Leu Leu Ala Ser Gln Pro Leu Arg
      405      410      415
Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His
      420      425      430
Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala
      435      440      445
Phe Ser Ala Gln Pro Leu Leu Ala Ala Pro Thr His Tyr Ala Gly Asp
      450      455      460
Ala Glu Trp Leu Ser Asp Thr Glu Thr Ser Ser Pro Trp Asp Asp Asp
      465      470      475      480
Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser
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<210> 3109

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3109

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<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

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			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
		35					40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55					60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65					70				75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105					110			
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
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Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
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Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
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<212> DNA

<213> Homo sapiens

<400> 3111

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 35 40 45
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
 50 55 60
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
 65 70 75 80
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
 85 90 95
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
 100 105 110
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
 115 120 125
 Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
 130 135 140
 Pro Tyr Gln Glu Thr Gly Ser
 145 150

<210> 3113
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 3113
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 120
 ccaaaaggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc
 180
 accatcggaa cccggaactt gcagaaatat gtgagccgca cttcggttgt gtttgtctcc
 240
 atctccttca ttgtcctgat gatcatttcc ctgcgatggc tcgtctttta ttacatccag
 300
 aggtttcgat atgcaaatgc cagggatagg aaccagcgcc gactggggga tgcagcaaag
 360
 aaagccatca gcaaactcca gatcaggacc atcaagaagg gtgacaagga aacagagtct
 420
 gattttgaca actgtgcagt ttgtattgaa ggggtacaagc ccaatgacgt tgtccggatc
 480

ctgccctgcc ggcattttt ccacaagtc tgtgttgacc cctggcttct agaccatcgt
 540
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<210> 3114

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3114

Xaa	Ala	Phe	Leu	Gln	Asn	Ala	Ser	Ala	Val	Val	Ile	Phe	Asn	Val	Gly
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Ser	Asn	Thr	Asn	Glu	Thr	Ile	Thr	Met	Pro	His	Ala	Gly	Val	Glu	Asp
			20					25					30		
Ile	Val	Ala	Ile	Met	Ile	Pro	Glu	Pro	Lys	Gly	Lys	Glu	Ile	Val	Ser
		35					40					45			
Leu	Leu	Glu	Arg	Asn	Ile	Thr	Val	Thr	Met	Tyr	Ile	Thr	Ile	Gly	Thr
		50				55					60				
Arg	Asn	Leu	Gln	Lys	Tyr	Val	Ser	Arg	Thr	Ser	Val	Val	Phe	Val	Ser
65					70					75				80	
Ile	Ser	Phe	Ile	Val	Leu	Met	Ile	Ile	Ser	Leu	Ala	Trp	Leu	Val	Phe
			85						90					95	
Tyr	Tyr	Ile	Gln	Arg	Phe	Arg	Tyr	Ala	Asn	Ala	Arg	Asp	Arg	Asn	Gln
			100					105					110		
Arg	Arg	Leu	Gly	Asp	Ala	Ala	Lys	Lys	Ala	Ile	Ser	Lys	Leu	Gln	Ile
		115					120					125			
Arg	Thr	Ile	Lys	Lys	Gly	Asp	Lys	Glu	Thr	Glu	Ser	Asp	Phe	Asp	Asn
	130				135						140				
Cys	Ala	Val	Cys	Ile	Glu	Gly	Tyr	Lys	Pro	Asn	Asp	Val	Val	Arg	Ile
145					150					155				160	
Leu	Pro	Cys	Arg	His	Leu	Phe	His	Lys	Ser	Cys	Val	Asp	Pro	Trp	Leu
			165					170						175	
Leu	Asp	His	Arg	Thr	Cys	Pro	Met	Cys	Lys	Met	Asn	Ile	Leu	Lys	Ala
		180					185					190			
Leu	Gly	Ile	Pro	Pro	Asn	Ala	Asp	Cys	Met	Asp	Asp	Phe	Ala	Thr	Asp
		195				200						205			
Phe	Glu														
	210														

<210> 3115

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3115

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 120
 gcagaaaaga tggaaaaaag gacatgtgca ctctgccccca aagatgtcga atataatgtc
 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca
 240
 ggacttgtgg aatgtgagga tcaggatcca cttaatcctg atagaagttt tgatgtggaa
 300
 tcagtaaaga aagaaatcca gagaggaagg aagttgaaat gcaaattttg tcataaaaga
 360
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 420
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc
 480
 cagcaacatg ctcaattccc gatcatcgct caaagtggta aattttcagg agtgaaaaga
 540
 aaaagaggaa ggaagaaacc cctctcaggc aatcatgtac agccacccga aacaatgaaa
 600
 tgtaatacat tcataagaca agtgaaagaa gagcatggca gacacacaga tgcaactgtg
 660
 aaagttcctt ttcttaagaa atgcaagnga agcaggactt cttaattact tacttgaaga
 720
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc
 780
 agactatgaa gaaatcggga gtgcactttt tgactgtaga ttgttcgaag acacatttgt
 840
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 900
 gaaggaagag attgagctac ttcaggactt aaaacaaacc ttgtgctctt ttcaagaaaa
 960
 tagagatctt atgtcaagtt ctacatcaat atcatccctg tcttattagg gattaccggt
 1020
 tcctaagcca agagtcatgt caaattgcaa tcagggtcaa aaccagagac caggctgtga
 1080
 aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tccctgttct
 1140
 tactggttga cattttgatc actctttgca cactcttggtg ttttttgctc actgtcacat
 1200
 tcccagcacc tagtatgctc agtaaatggt tgtggaataa gtgcataaaa tgttcttaac
 1260
 ctttgattct acttacagcc catgatagcc tcttcttaga tataataaat ttggattata
 1320
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 1366

<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35				40					45				
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50		55		60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr				
65		70		75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys				
	85		90	95
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile				
	100		105	110
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln				
	115		120	125
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro				
	130		135	140
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr				
145		150		155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr				
	165		170	175
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser				
	180		185	190

<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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120
gcctcagcct ggggggtcac cctgagcccc aaagactgcc aggtgttccg ctcagaccat
180
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240
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300
gcctctaagc tccaagaatt gcacctctcc agcaatgggc tggaaagcct ctcgcccga
360
ttcctgcggc cagtgcgca gctgagggtg ctggatctaa cccgaaacgc cctgaccggg
420
ctgccccgg gcctcttcca ggcctcagcc accctggaca cctggtatt gaaagaaaac
480
cagctggagg tcttgagggt ctcgtggcta cacggcctga aagctctggg gcactctggac
540
ctgtctggga accgcctccg gaaactgccc cccgggctgc tggccaactt caccctctg
600
cgcacccttg accttgggga gaaccagttg gagaccttg cacctgacct cctgaggggt
660
ccgctgcaat tagaacggct acatctagaa ggcaacaaat tgcaagtact gggaaaagat
720
ctcctcttg cgcagccgga cctgcgctac ctcttctga gcggcaacaa gctggccagg
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840
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900

cgggatggct tcgacatctc cggcaacccc tggatctgtg accagaacct gagcgacctc
 960
 tatcgttggc ttcaggccca aaaagacaag atgttttccc agaattgacac gcgctgtgct
 1020
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 1080
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 1260
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 1373

<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
		35					40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
	50					55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65					70					75				80	
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85					90					95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
	115					120						125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
	130					135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150					155				160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
				165					170					175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
			180					185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
		195				200						205			
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
	210					215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225					230					235				240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

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                245                250                255
Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu
                260                265                270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser
                275                280                285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr
                290                295                300
Leu Leu Ala Val Ala Lys Ser Gln
305                310

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<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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120
tacgtggagg tgggtcccctg ttccacagag gagatgagcc gagtgctgat ggggggaccc
180
ttgggcccga gtggcatgtc cctccacccc tgcaagctgc cctgcctctc accacctacc
240
tacaccacct tccaagccac cccaacgctc attcccacgg agacggcagc tctatacccc
300
tcttcagcac tgctcccagc tgccaggggtg cctgctgccc ccacctgtg tgctactat
360
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420
aacgcgt
427

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<210> 3120

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3120

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Val His Met Val Leu Asn Gln Gln Gly Arg Pro Ser Gly Asp Ala Phe
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Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Ala Gln Arg Cys
20          25          30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
35          40          45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
50          55          60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65          70          75          80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
85          90          95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
100         105         110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

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	115		120		125								
Leu	Asn	Tyr	Thr	Ala	Tyr	Tyr	Pro	Ser	Pro	Glu	Asp	Asn	Ala
	130					135						140	

<210> 3121
 <211> 284
 <212> DNA
 <213> Homo sapiens

<400> 3121
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 120
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcctgctaatt
 180
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 240
 cttccgggga agattctctt tattctggtg gacagtggta tgaa
 284

<210> 3122
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 3122
 Met Ala Ala Gly Thr Ser Val Ser His Val Gly Ser Trp Ala Ala Pro
 1 5 10 15
 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser
 20 25 30
 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
 35 40 45
 Ser Ile Val Pro Leu Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
 50 55 60
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
 65 70 75 80
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
 85 90

<210> 3123
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 3123
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 120
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
 180
 atcgcagtcc ccaagttcaa acagaggaag ggggagtccg acggggccta tatccaccgc
 240

atgcagcaag aggccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca
 300
 gaggtgcagg cagctcccaa ggagaagtct gagcagaaaa aagc
 344

<210> 3124
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3124
 Met Arg Ser Arg Gln Glu Met Lys Asn Pro Ile Ser Asn Lys Lys Arg
 1 5 10 15
 Lys Lys Ala Ala Gln Val Thr Phe Arg Lys Thr Leu Glu Lys Glu Ala
 20 25 30
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys
 35 40 45
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
 50 55 60
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
 65 70 75 80
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
 85 90

<210> 3125
 <211> 647
 <212> DNA
 <213> Homo sapiens

<400> 3125
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 60
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 120
 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa
 180
 ataagataag gctggctcca gggaagtaat tccccagtt cccctgagcc ttggatctgg
 240
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc
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 360
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 420
 aacccatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact
 480
 ctgattcatc catcaagaca aataaactca gtctatggag gtttagcagg caatttgtga
 540
 agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataaccagg
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 647

<210> 3126

<211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3126
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 20 25 30
 His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
 35 40 45
 His Leu Phe Cys Ser Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
 50 55 60
 Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
 65 70 75 80
 Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
 85 90 95
 Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
 100 105 110
 Cys Asp Val Pro
 115

<210> 3127
 <211> 2218
 <212> DNA
 <213> Homo sapiens

<400> 3127
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 120
 acttttgaga aattgaagag cctaggggctt tttgggctgc aagtcccaga agaatatggt
 180
 ggcttgggct tctccaacac catgtactca agactagggg agatcatcag catggatggg
 240
 tccatcactg tgaccctggc agcgcaccag gctattggcc tcaaggggat catcttggct
 300
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 360
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 420
 aactaagtg aagacaagaa gcactacatc ctcaatggct ccaagggtctg gattactaat
 480
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 540
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 660
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 720
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960
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1200
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1320
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1560
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1620
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1680
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1920
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2040
tgtgtcaggt gtggatagcc atttctgctc aaccacacat tctctaagaa acagcttgaa
2100
agctctgtct gggtcattca tttaaactag aagcagaggc acttaaaaca tgtaccagga
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2218

<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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          20          25          30
Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
          35          40          45
Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
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Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
65          70          75          80
Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
          85          90          95
Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
          100          105          110
Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
          115          120          125
Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
          130          135          140
Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
145          150          155          160
Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
          165          170          175
Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
          180          185          190
Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
          195          200          205
Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
          210          215          220
Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
225          230          235          240
Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala
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Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
          260          265          270
Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu
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Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
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Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
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Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
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Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg
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Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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			420					425					430				
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Thr	Tyr	Cys	Phe	Gly	Arg	Thr	Val	Glu	Thr	Leu	Leu	Leu	Arg	Phe	Gly		
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465					470				475						480		
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Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr	Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser		
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Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu	Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys		
	530				535						540						
Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys	Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro		
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<210> 3129

<211> 1964

<212> DNA

<213> Homo sapiens

<400> 3129

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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			20					25					30		
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35					40					45		
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
			50				55					60			
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

65					70					75					80
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
				85					90					95	
Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
			100					105					110		
Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
		115					120					125			
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
	130					135					140				
Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
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Gln	Ile	His	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	
			165					170					175		
Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
			180					185					190		
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
	195						200					205			
Ile	Ser	Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile
	210					215					220				
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
225					230					235					240
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
			245					250					255		
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<210> 3131
 <211> 1544
 <212> DNA
 <213> Homo sapiens

<400> 3131
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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
		35					40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
	50					55				60					
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65					70				75					80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90					95		
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
		100					105					110			
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

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<210> 3134
<211> 51
<212> PRT
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<213> Homo sapiens

<400> 3134

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Ala	Val	Arg	Gln	Val	Pro	Ser	Ser	Cys	Ala	Ala	Ser	Arg	Lys	Asn	Glu
			20					25					30		
Thr	Glu	Val	Lys	Ser	Glu	Glu	Gly	Pro	Gly	Trp	Thr	Ile	Leu	Arg	Asp
		35					40					45			
Asp	Phe	Met													
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<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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180
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1080

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<210> 3136

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3136

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Pro	Ala	Ala	Met	Glu	Cys	His	Leu	Lys	Thr	His	Tyr	Gln	Met	Glu	Tyr
			20					25					30		
Lys	Cys	Pro	Ile	Cys	Gln	Thr	Val	Lys	Ala	Asn	Gln	Leu	Glu	Leu	Glu
		35					40					45			
Thr	His	Thr	Arg	Glu	His	Arg	Leu	Gly	Asn	His	Tyr	Lys	Cys	Asp	Gln
	50					55					60				
Cys	Gly	Tyr	Leu	Ser	Lys	Thr	Ala	Asn	Lys	Leu	Ile	Glu	His	Val	Arg
65					70				75					80	
Val	His	Thr	Gly	Ser	Gly	Pro	Phe	His	Trp	Asp	Gln	Cys	Ser	Tyr	Ser
				85				90					95		
Cys	Lys	Arg	Lys	Asp	Asn	Leu	Asn	Leu	His	Lys	Lys	Leu	Lys	His	Ala
			100				105					110			
Pro	Arg	Gln	Thr	Phe	Ser	Cys	Glu	Glu	Cys	Leu	Phe	Lys	Thr	Thr	His
	115						120				125				
Pro	Phe	Val	Phe	Ser	Arg	His	Val	Lys	Lys	His	Gln	Ser	Gly	Asp	Cys
	130				135						140				
Pro	Glu	Glu	Asp	Lys	Lys	Gly	Leu	Cys	Pro	Ala	Pro	Lys	Glu	Pro	Ala
145				150				155						160	
Gly	Pro	Gly	Ala	Pro	Leu	Leu	Val	Val	Gly	Ser	Ser	Arg	Asn	Leu	Leu
			165					170					175		
Ser	Pro	Leu	Ser	Val	Met	Ser	Ala	Ser	Gln	Ala	Leu	Gln	Thr	Val	Ala
		180					185					190			
Leu	Ser	Ala	Ala	His	Gly	Ser	Ser	Ser	Glu	Pro	Asn	Leu	Ala	Leu	Lys
	195					200					205				
Ala	Leu	Ala	Phe	Asn	Gly	Ser	Pro	Leu	Arg	Phe	Asp	Lys	Tyr	Arg	Asn
	210				215					220					
Ser	Asp	Phe	Ala	His	Leu	Ile	Pro	Leu	Thr	Met	Leu	Tyr	Pro	Lys	Asn
225				230				235						240	
His	Leu	Asp	Leu	Thr	Phe	His	Pro	Pro	Arg	Pro	Gln	Thr	Ala	Pro	Pro

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<210> 3137
 <211> 5773
 <212> DNA
 <213> Homo sapiens

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<212> DNA

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Ser Ser Leu Phe Glu	Arg Thr Cys Arg Gln	Tyr Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg Lys	Glu Asp Met Phe Lys Asp
405	410	415
Asn Phe Asp Glu Met	Asp Thr Ser Arg Glu	Ile Val Gln Gln Leu Ile
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Gln Glu Gln		
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<210> 3143

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3143

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<210> 3144

<211> 81
 <212> PRT
 <213> Homo sapiens

<400> 3144
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 35 40 45
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<210> 3145
 <211> 436
 <212> DNA
 <213> Homo sapiens

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<210> 3146
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3146
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 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

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Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser	Gly His Ser Ala Arg		
65	70	75	80	
Gln Met Thr Ser Gly	Gly Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
	85	90	95	
Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
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Pro Asn Val Val Ser	Ser Arg Arg Arg Leu Thr	Pro Arg Arg Gly Trp		
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<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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			165					170						175	
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Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
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Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro
	210				215					220					
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val
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Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
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720

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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
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Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
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Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
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Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
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Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
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Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
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Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
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Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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 Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln
 65 70 75 80
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 85 90 95
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 <212> DNA
 <213> Homo sapiens

<400> 3153

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<212> PRT

<213> Homo sapiens

<400> 3154

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Thr Asp Thr Ala Pro Trp Ala Ala Leu Pro Val Gly His Leu Ser Leu
 1           5           10           15
Cys Pro Gly Ala Gly Ile Ala Ser Arg Arg Pro Arg Gln Gln Gly Asp
          20           25           30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
          35           40           45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
 50           55           60
Gly
65

```

<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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caattggatg taattatggt aaaaccttat aaactctgta acaatcaaga agaaaacgat
60
gcagtgtctt ctgctaagaa accaaagcta gccctggaag attcggaata cactgcctct
120
actaactgtg actcttcttc agaaggactg gaaaaggaca cagcaacaca gagaagtgc
180
cagacttgcc tagaaccatc atgttcatgt tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaattct ggaaattttg aagaaaggaagg aggcatttgt tttagatatt
300
gacttggatt ttttttcagt caagaatccc ttcaaaaaaa tgttcaactca ggaagagtac
360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgc
480
gatttgtgtg atggtgatga tgaagaaacg gtacagggat gggcttcaaa ccctggaatg
540
gaatcactag t
551

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Met Val Lys Pro Tyr Lys Leu Cys Asn Asn Gln Glu Glu Asn Asp Ala
 1           5           10           15
Val Ser Ser Ala Lys Lys Pro Lys Leu Ala Leu Glu Asp Ser Glu Asn
          20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

```

50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
65		70		75
Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				80
	85		90	95
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100		105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145		150		155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				160
	165		170	175
Ser Leu				

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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nntgaagact agaggaggta ggtccttggg ggacctagtc agtaggtatt tacaaggcag
60
gcccttggga tcctacagtg ggatgggcac ccacaaaccc caggttgcgg ccagccttac
120
tctctggtag gacttctgat ggtgggggca cctccccagg tcacagtcca ggtgcagggc
180
caggaggtcc tatcagagaa gatggagccc tccagtttcc agcccctacc tgaaactgag
240
cctccaactc cagagcctgg gcccaagaca cctcctagga ctatgcagga atcaccactg
300
ggcctgcagg tgaaagagga gtcagagggt acagaggact cagatttcct ggagtctggg
360
cctctagctg ccaccagga gtctgtacct accctcctgc ctgaggaggc ccagtgacca
420
ctgtgatttc agagatgtgg gaccgtgctg gaccagatct tccccacag caagactggg
480
cctgagggtc cctcatggag ggagcacccc agggccctgt ggcatgagga agctgggggg
540
atcttctccc cagggttcgc gctgcagcta ggcagcatct ccgcagggtcc aggtagtgtg
600
agccctcacc tccacgtccc ctgggacctc ggcattggctg gcctttcttg ccagatccaa
660
tcaccctccc gcgaagggtg ctttgcgcat gcgcttctgc tccccagcga tctgaggagt
720
gaacaggacc ccacggacga ggatccctgc cgggggtgtg gccctgctct ggtcaccacc
780
cgctggcgct cccccagggg ccggagccgg ggccgcccc gcaactggggg cgggggtggtt
840
aggggcggcc gttgcgatgt atgtggcaag gtgttcagcc aacgcagcaa cctgctgagg
900

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cac
903

<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
Met Val Gly Ala Pro Pro Gln Val Thr Val Gln Val Gln Gly Gln Glu
1 5 10 15
Val Leu Ser Glu Lys Met Glu Pro Ser Ser Phe Gln Pro' Leu Pro Glu
20 25 30
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr
35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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60
ctcgttcgtg tccccgcccc tcgctcctgc agctactgct cagaaacgct ggggcgccca
120
ccctggcaga ctaacgaagc agctcccttc ccaccccaac tgcagggtcta attttggacg
180
ctttgcctgc catttcttcc aggttgaggg agccgcagag gcggaggctc gcgtattcct
240
gcagtcagca cccacgtcgc ccccgagcgc tcggtgctca ggcccttcgc gagcggggct
300
ctccgtctgc ggtecccttg gaaggctctg ggcggtgca gaggcgggcc gtccggtttg
360
gtcacctct cccaggaaac ttcacactgg agagccaaaa ggagtggaag agcctgtctt
420
ggagattttc ctggggaaat cctgagggtca ttcattatga agtgtaccgc gcgggagtg
480
ctcagagtaa ccacagtgc gttcatggct agagcaattc cagccatggg ggttcccaat
540
gccactttat tggagaaact tttggaaaaa tacatggatg aggatgggtga gtggtggata
600
gccaaacaac gagggaaaag ggccatcaca gacaatgaca tgcagagtat tttggacctt
660
cataataaat tacgaagtca ggtgtatcca acagcctcta atatggagta tatgacatgg
720
gatgtagagc tggaaagatc tgcagaatcc tgggctgaaa gttgcttggt ggaacatgga
780

cctgcaagct tgcctccatc aattggacag aatttgggag cacactgggg aagatatagg
840
cccccgacgt ttcattgtaca atcgtggtat gatgaagtga aagacttttag ctacccatat
900
gaacatgaat gcaaccata ttgtccattc aggtgttctg gccctgtatg tacacattat
960
acacaggtcg tgtgggcaac tagtaacaga atcgggttggtg ccattaattt gtgtcataac
1020
atgaacatct gggggcagat atggcccaaa gctgtctacc tgggtgtgcaa ttactcccca
1080
aagggaact ggtggggcca tggcccttac aaacatgggc ggccctgttc tgcttgccca
1140
cctagttttg gagggggctg tagagaaaat ctgtgtctaca aagaagggtc agacaggtat
1200
tatccccctc gagaagagga aacaaatgaa atagaacgac agcagtcaca agtccatgac
1260
acccatgtcc ggacaagatc agatgatagt agcagaaatg aagtcataag cgcacagcaa
1320
atgtcccaaa ttgtttcttg tgaagtaaga ttaagagatc agtgcaaagg aacaacctgc
1380
aatagggtacg aatgtcctgc tggctgtttg gatagtaaag ctaaagttat tggcagtgtg
1440
cattatgaaa tgcaatccag catctgtaga gctgcaattc attatggtat aatagacaat
1500
gatggtggct gggtagatat cactagacaa ggaagaaagc attatttcat caagtccaat
1560
agaaatggta ttcaaacaat tggcaaatat cagtctgcta attccttcac agtctctaaa
1620
gtaacagttc aggctgtgac ttgtgaaaca actgtggaca gctctgtcca tttcataagc
1680
ctgcttcaca ttgccaaga gtatactgtc ctctgtaactg tatgcaagca aatccacatt
1740
atgctcgtgt aattgggact cgagtttatt ctgatctgtc cagtatctgc agagcagcag
1800
tacatgctgg gagtagttcg aaatcacggt gggtatgttg atgtaatgcc tgtggaccaa
1860
agaaagacct acattgcttc ttttcagaat ggaatcttct cagaaagttt acagaatcct
1920
ccaggaggaa aggcattcag agtgtttgc gttgtgtgaa actgaatact tgggaagagga
1980
ccataaagac tattccaaat gcaatatttc tgaattttgt ataaaactgt aacattactg
2040
tacagagtac atcaactatt ttcagcccaa aaagggtgcca aatgcatata aatcttgata
2100
aacaagtct ataaaataaa acatgggaca ttagcttttg gaaaagtaat gaaaatataa
2160
tggttttaga aatcctgtgt taaatattgc tatattttct tagcagttat ttctacagtt
2220
aattacatag tcatgattgt tctacgtttc atatattata tgggtgcttg tatatgccac
2280
taataaaatg aatctaaaca ttgaatgtga atggccctca gaaaatcatc tagtgcattt
2340
aaaaataatc gactctaaaa ctgaaagaaa ccttatcaca ttttccccag ttcaatgcta
2400

tgccatta
2408

<210> 3160
<211> 431
<212> PRT
<213> Homo sapiens

<400> 3160
Met Lys Cys Thr Ala Arg Glu Trp Leu Arg Val Thr Thr Val Leu Phe
1 5 10 15
Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr Leu Leu
20 25 30
Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu Trp Trp Ile
35 40 45
Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
50 55 60
Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
65 70 75 80
Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
85 90 95
Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
100 105 110
Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
115 120 125
Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
130 135 140
Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys
145 150 155 160
Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser
165 170 175
Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp
180 185 190
Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro
195 200 205
Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys
210 215 220
Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
225 230 235 240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu Thr
245 250 255
Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His Val Arg
260 265 270
Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln
275 280 285
Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys
290 295 300
Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala Gly Cys Leu Asp Ser
305 310 315 320
Lys Ala Lys Val Ile Gly Ser Val His Tyr Glu Met Gln Ser Ser Ile
325 330 335
Cys Arg Ala Ala Ile His Tyr Gly Ile Ile Asp Asn Asp Gly Gly Trp
340 345 350
Val Asp Ile Thr Arg Gln Gly Arg Lys His Tyr Phe Ile Lys Ser Asn

```

<400> 3161
nnaacaccag caaaattttt gaaaaagggt gcaaaggagt ttggcttcca aaataatggc
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ttctcgggta acatcaatag aaacaagacc ggagagataa cagcctcctc caacaaatcc
120
ctcaacttgc taaaaatcaa gcatggcgat ttgttggtcc tgtttccctc gagccttgct
180
gggcctcat ctgaaatgga gacgtcagtt ccaccgggct tcaaagtctt tggcgctccc
240
aacgtgggtg aggatgagat tgatcagtag ctcagcaaac aggacgggaa gatttacaga
300
agccgagacc cacagctatg ccgccacggc cctttgggga aatgcgtgca ctgcgtccct
360
ctagagccat tcgatgagga ctatctaaac catctcgagc ctcccgtgaa gcacatgtcc
420
ttccacgcct acatccggaa gctgactgga ggggctgaca aggggaagtt tgttgccctg
480
gagaacatca gctgcaagat taagtcaggg tgcgaggggc acctcccgtg gccgaatggc
540
atctgtacta agtgccagcc gagcgccatc acgctgaaca gacagaagta caggcatgtg
600
gacaatatca tgtttgagaa tcacaccgtc gctgaccgct ttcttgactt ctggagaaaag
660
acaggggaacc agcatttttg gtacttatac ggacggtaca cggagcacaa agacattccc
720
cttggcatca gggctgaagt ggctgcgatt tatgagccac ctcagattgg tacacagaac
780
agcttggagc ttcttgagga tccaaaagct gaagtggtcg atgaaattgc tgccaaaactt
840
ggcctgcgga aggttggctg gatatttaca gacctcgtct cagaagatac ccgaaaggg
900
accgtccgct acagtcgaaa taaggacacc tatttcctaa gttcagaaga gtgcatcact
960
gcaggagact tccagaacaa gcatcccaac atgtgccggc tctctccaga cggacatttt
1020
ggatccaagt ttgttactgc agtggctaca ggtggctcctg acaaccaagt ccactttgaa
1080
gggtaccagg tgtccaatca gtgtatggca ctgggtccgtg atgagtgttt gctgccatgc
1140

```



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<210> 3162
<211> 386
<212> PRT
<213> Homo sapiens
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2377

	355		360		365										
Met	Ala	Leu	Val	Arg	Asp	Glu	Cys	Leu	Leu	Pro	Cys	Lys	Asp	Ala	Pro
	370					375					380				
Val	Cys														
385															

<210> 3163
 <211> 1075
 <212> DNA
 <213> Homo sapiens

<400> 3163
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 60
 tgccagtcac cggaacgtca gaaacctgaa gtgtcatctg gggccatgga cggagagggg
 120
 tgggggctac cagtggaccc actgactcct ggacatcagg atgtctgcc atggcaaagg
 180
 tggtatcatc catgttcttc gtcttcagtt ctcctcggc aggcctgcgc ctcaccggct
 240
 tcatgcagct cttcagctgc cntggcctca gcctccacgg gaccctggca ctggggctgt
 300
 ggctccagct gcggcagctg ctgctgctgg ggcagccctt cggcatcagt ggggtgtggga
 360
 gcgggtgcga tccggagcag gactgtgtag ttgcggccgt ggttggtggc ccagaaagtg
 420
 ccctcannng ggtctcatag cgcaccancg aagtcgaggc gcgccccatc gcccgcgccc
 480
 tcagcaaagg gcagctggaa ggcaaagcgg tcggtgcggc cgccgtcgtc gggcgaggag
 540
 gcgatgcct ggccgggacc caggccgagc cccggatcca ggatgggata tctgctcct
 600
 gtctctcccg ctctgccc cggcgggctg cgcgggacgt agcgcgctgg gtggtcgcaa
 660
 aaggaagccc agccgtcgtg tgaggccgca cgtgcaccgc cttctcgaag gagcggttca
 720
 gcacgcgtac caaccgcgc agcaccggcg ggcggccccc aggcaccac accccggcac
 780
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 840
 agcgctccag acggcccggc gcgggcggca gcgaaaatgt ggggaccagg taaaaccncc
 900
 ccgccagcgg ggacggggca cagcgggtgag ggctcggggc aagcctcctc ttctcctcc
 960
 ccttcacccc catcctcgcc atcgtcgtcc tcgtcggccc cgccgcccgc gccaatatgg
 1020
 cgcgtacggc ccctgtggag ccccgcgtgc ggcattccgc gccccctcg ccggc
 1075

<210> 3164
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3164

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Met Asp Gly Glu Gly Trp Gly Leu Pro Val Asp Pro Leu Thr Pro Gly
 1           5           10           15
His Gln Asp Ala Leu Pro Trp Gln Arg Cys Tyr His Pro Cys Ser Ser
          20           25           30
Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
          35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
          50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
65           70           75           80
Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
          85           90

```

<210> 3165

<211> 2413

<212> DNA

<213> Homo sapiens

<400> 3165

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gaaggctgtg cggagcggcg cggcacagag cctgttggtg agctcagtat gtcgtgggaa
60
tccggggccg ggccaggtct aggttcccag gggatggatc tcgtgtggag tgcgtggtac
120
ggaaagtgcg ttaaagggaag agggtcgttg ccactctcgg cccacggcat cgtggtcgcc
180
tggctcagca gggccgagtg ggaccaggtg acggtttatc tgttctgtga cgaccataag
240
ttgcagcggg acgcgcttaa ccgcatcacg gtgtggagga gcaggtcagg caacgaactc
300
cctctggcag tggcttctac tgctgacctg atacgctgta agctcttgga tgtaactggt
360
ggcttgggca ctgatgaact tagactgctc tatggcatgg cattggtcag gtttgtgaat
420
cttatctcag agaggaagac aaagtttgcc aagggtcccc tcaagtgtct ggctcaagag
480
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600
tggtgccgcc aactggagaa cagcctgaga gagacctggg agttggagga gttcagggaa
660
gggatagagg aagaggatca agaggaagat aagaacattg ttgttgatga catcacagaa
720
cagaaaccag agcctcagga tgatgggaaa agtacggagt cagatgtaaa ggccgatgga
780
gacagcaaag gcagcgaaga ggtggattct cattgcaaaa aggccctgag tcataaagag
840
ctatatgaaa gagcccgaga actgctggta tcatacgaag aggagcagtt tacgggtgctg
900
gagaaattta ggtatttacc taaggccatt aaggcgtgga ataaccgctc cccacgtgta
960
gaatgtgtcc tggcagagct caagggcggt acatgcgaga acagggaggc tgtgctggat
1020

```

gcttttctgg atgatggctt ccttgteccc acatttgaac agttggcagc tttgcagata
1080
gaatatgaag aaaacgtgga cttgaatgac gtcctggtgc caaagccgtt ctctcagttc
1140
tggcagcccc tgctcagggg cctgcactcc cagaacttca cgcaggccct attggagagg
1200
atgctctctg aactgccagc cttggggatc agcgggatcc ggcctaccta catcctcaga
1260
tggaccgttg aactgatcgt ggccaacacc aagactggac ggaatgctcg ccgattttct
1320
gcaggccagt gggaagcaag aaggggctgg aggctgttca actgctccgc ctcccttgac
1380
tggccccgga tggttgagtc ctgcttgggc tcaccttgct gggccagccc ccaactcctt
1440
cggatcatct tcaaagccat ggggcagggc ctgccagacg aggagcagga gaagctgctg
1500
cgcactctgtt ccatttatac ccagagtggg gaaaacagcc tggtagcagga gggctctgag
1560
gcctccccca ttgggaagtc tccatataca ctagacagcc tgtattggag cgtcaagcca
1620
gccagctcca gcttcgggtc tgaagcaaag gccagcaac aggaggagca gggcagtgtt
1680
aatgatgtca aggaagagga gaaggaggag aaagagggtc tgccagacca ggtagaggag
1740
gaggaagaaa atgatgacca agaggaggaa gaggaggatg aagatgatga agatgatgaa
1800
gaggaagaca gaatggaggt ggggcctttc tctacagggc aagagtcccc cactgccgag
1860
aatgctaggc ttctggccca gaaaagagga gctttgcagg gctctgcatg gcagggttagc
1920
tcagaagacg tgcgatggga cacatttccc ctaggccgaa tgccagggtca gaccgaggac
1980
ccagcagagc tcatgctgga gaattatgac accatgtatc ttttggacca gcctgtgcta
2040
gagcagcggc tgggaaccctc aacatgcaag actgacacct tgggcctgag ctgtggtgtc
2100
ggcagtggca actgcagcaa cagcagcagc agcaacttcg agggccttct ctggagccag
2160
gggcagctgc atgggctcaa aactggcctg cagctcttct gatggccatc cctggtgcaa
2220
gtgttcatcc agccgtgcca gggcaacagc ccaccccta gtacaactga tgctccctga
2280
gacaacctgg gagacagcct ggatcagcca catcaactca gttgtccacc acaggggaat
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2400
aaaaaaaaaa aaa
2413

<210> 3166
<211> 717
<212> PRT
<213> Homo sapiens

<400> 3166

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Met Ser Trp Glu Ser Gly Ala Gly Pro Gly Leu Gly Ser Gln Gly Met
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Asp Leu Val Trp Ser Ala Trp Tyr Gly Lys Cys Val Lys Gly Lys Gly
 20          25          30
Ser Leu Pro Leu Ser Ala His Gly Ile Val Val Ala Trp Leu Ser Arg
 35          40          45
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
 50          55          60
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
 65          70          75          80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
 85          90          95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
 100          105          110
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu
 115          120          125
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
 130          135          140
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
 145          150          155          160
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
 165          170          175
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser
 180          185          190
Leu Arg Glu Thr Trp Glu Leu Glu Phe Arg Glu Gly Ile Glu Glu
 195          200          205
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu
 210          215          220
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
 225          230          235          240
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys
 245          250          255
Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
 260          265          270
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg
 275          280          285
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val
 290          295          300
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu
 305          310          315          320
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe
 325          330          335
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu
 340          345          350
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
 355          360          365
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg
 370          375          380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
 385          390          395          400
Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys Thr
 405          410          415
Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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<210> 3167
<211> 2730
<212> DNA
<213> Homo sapiens
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2382

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Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
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Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
     115           120           125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
    130           135           140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
   145           150           155           160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
      165           170           175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
     180           185           190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
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Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
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Lys Lys Pro Leu
225

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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

<400> 3173

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420

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<210> 3174

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3174

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			20					25					30		
Gln	Thr	Phe	Pro	Leu	Gln	Leu	Glu	Asn	Gly	Gln	Thr	Val	Glu	Arg	Thr
			35				40					45			
Val	Ala	Gln	Tyr	Phe	Arg	Glu	Lys	Tyr	Thr	Leu	Gln	Leu	Lys	Tyr	Pro
			50			55				60					
His	Leu	Pro	Cys	Leu	Gln	Val	Gly	Gln	Glu	Gln	Lys	His	Thr	Tyr	Leu
65					70				75					80	
Pro	Leu	Glu	Val	Cys	Asn	Ile	Val	Ala	Gly	Gln	Arg	Cys	Ile	Lys	Lys
				85				90					95		
Leu	Thr	Asp	Asn	Gln	Thr	Ser	Thr	Met	Ile	Lys	Ala	Thr	Ala	Arg	Ser
			100					105					110		
Ala	Pro	Asp	Arg	Gln	Glu	Glu	Ile	Ser	Arg	Leu	Val	Arg	Ser	Ala	Asn
			115				120					125			
Tyr	Glu	Thr	Asp	Pro	Phe	Val	Gln	Glu	Phe	Gln	Phe	Lys	Val	Arg	Asp
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<210> 3175

<211> 948

<212> DNA

<213> Homo sapiens

<400> 3175

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<210> 3176
 <211> 92
 <212> PRT
 <213> Homo sapiens

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 Pro Asp Ala Trp Gly Leu Pro Thr Pro Gln Gln Ala Arg Gly Lys Ala
 35 40 45
 Arg Gly Asn Glu Tyr Gln Pro Ser Asn Ile Lys Arg Lys Asn Lys His
 50 55 60
 Gly Trp Val Arg Arg Leu Ser Thr Pro Ala Gly Val Gln Val Ile Leu
 65 70 75 80
 Arg Arg Met Leu Lys Gly Arg Lys Ser Leu Ser His
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<210> 3177
 <211> 1857
 <212> DNA
 <213> Homo sapiens

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<210> 3178

<211> 273
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<400> 3178

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Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro
      35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
      50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
      85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
      100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
      115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
      130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
      165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
      180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
      195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
      210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
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<210> 3179
 <211> 3447
 <212> DNA
 <213> Homo sapiens

<400> 3179

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<211> 127

<212> PRT

<213> Homo sapiens

<400> 3180

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			20					25					30		
Ala	Phe	Thr	Pro	Thr	Gly	Lys	Val	Lys	Leu	Thr	Phe	Val	Phe	Leu	Phe
			35				40					45			
Asn	Asn	Phe	Met	Ile	Asn	Lys	Glu	Leu	Gln	Leu	Glu	Thr	Lys	Ala	Asn
	50					55				60					
Ser	Arg	Asn	Ser	Leu	Thr	Pro	Ser	Cys	Pro	Met	Val	Phe	Met	Ile	Ala
65					70				75					80	
Cys	Tyr	Gln	Asn	Glu	Ala	Leu	Cys	Ser	Thr	Leu	Tyr	Ser	Lys	Ala	Phe
				85					90				95		
Tyr	Ala	Pro	Thr	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Ser	Ala	Leu	His	Thr
			100					105					110		
Gly	Arg	Lys	Thr	Ala	Ser	Ser	Tyr	Arg	Leu	Cys	Glu	Asn	Thr	Gln	
			115					120					125		

<210> 3181

<211> 287

<212> DNA

<213> Homo sapiens

<400> 3181

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<210> 3182

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3182

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			20					25					30		
Gly	His	Met	Lys	Gln	Gly	Gly	Leu	Leu	Lys	Asp	Gly	Trp	Ala	Ser	Pro

	35					40					45								
Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln				
	50					55					60								
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys				
65					70					75					80				
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro					
				85					90					95					

<210> 3183

<211> 1457

<212> DNA

<213> Homo sapiens

<400> 3183

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<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

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Pro	Gln	Leu	Ile	Thr	His	Ile	Pro	Arg	Asn	Ala	Gly	Tyr	Ser	Phe	Val
			20					25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg	
		35					40				45				
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
	50					55					60				
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65					70				75					80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90					95		
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105				110			
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
	115						120				125				
Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
	130					135					140				

<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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 120
 cctggtaacc tgaggaggtg tagagcacc agaaggaagg gtaaaagcag ggggcaaagc
 180
 ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa
 240
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 300
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 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa
 420
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 480
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 600
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 660
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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

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His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
			35				40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
		50			55					60					
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65				70					75					80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

				85					90					95				
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys			
				100					105					110				

<210> 3187

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3187

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120
aagtggtcct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca
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240
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360
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420
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720
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860

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<210> 3188

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3188

Thr	Pro	Gly	Leu	Lys	Trp	Ser	Ser	Arg	Leu	Gly	Leu	Leu	Ser	Ser	Trp			
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Asp	Tyr	Arg	Tyr	Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro			
			20					25				30						
Glu	Val	Val	Leu	Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu			
		35				40					45							
Val	Val	Lys	Lys	Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg			

50		55		60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser				
65		70		75
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu				80
	85		90	95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr				
	100		105	110
Leu Leu Gly Lys Pro Leu Leu Gly				
	115		120	

<210> 3189

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3189

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120
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180
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240
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300
tgcttgctca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
360
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440

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<210> 3190

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3190

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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln				
	20		25	30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu				
	35		40	45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met				
	50		55	60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met				
65	70		75	80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile				
	85		90	95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile				
	100		105	110

<210> 3191
 <211> 266
 <212> DNA
 <213> Homo sapiens

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 120
 aacagcagga caatccacac ttccgtagcc tcctgggggtc ggccgcccag ccagccccggg
 180
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga
 240
 tacagaaatt catctcccaa aaagcg
 266

<210> 3192
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3192
 Met Asn Phe Cys Ile Ser Met Leu Ser Thr Leu Phe Ser Phe Leu Pro
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 Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Asp
 20 25 30
 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
 35 40 45
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
 50 55 60
 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
 65 70 75 80
 Pro Ser Ala Ser

<210> 3193
 <211> 567
 <212> DNA
 <213> Homo sapiens

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 240
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gctggcctcg tgattcctct ctttcctgc aggccacggt tcacctactt ccccttctcc
 420
 ctgggccacc gctcctgcat cgggcagcag tttgctcaga tggagggtgaa ggtgggtcatg
 480
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 567

<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
			35				40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75					80
Met	Glu	Val	Lys	Val	Met	Ala	Lys	Leu	Leu	Gln	Arg	Leu	Glu	Phe	
				85				90					95		
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
			100					105					110		
Lys	Pro	Leu	Asp												
			115												

<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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 180
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 480

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 960
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 987

<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50					55					60				
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65					70					75					80
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85					90					95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105						110	
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
		115				120						125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
	130					135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145						150									

<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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<210> 3198

<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

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Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
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Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
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Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70					75				80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
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Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
			115				120					125			
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
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Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
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Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

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Ser	Pro	Glu	Lys	Ile	Leu	Asn	Gly	Lys	Gly	Ile	Leu	Pro	Thr	Thr	Ile	
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Asp	Lys	Lys	His	Gln	Asn	Gly	Thr	Lys	Asn	Ser	Asn	Lys	Pro	Tyr	Arg	
				245					250					255		
Arg	Leu	Ser	Glu	Arg	Glu	Phe	Asp	Pro	Asn	Lys	His	Cys	Gly	Val	Leu	
			260					265				270				
Asp	Pro	Glu	Thr	Lys	Lys	Pro	Cys	Thr	Arg	Ser	Leu	Thr	Cys	Lys	Thr	
		275					280					285				
His	Ser	Leu	Ser	His	Arg	Arg	Ala	Val	Pro	Gly	Arg	Lys	Lys	Gln	Phe	
	290					295					300					
Asp	Leu	Leu	Leu	Ala	Glu	His	Lys	Ala	Lys	Ser	Arg	Glu	Lys	Glu	Val	
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Lys	Asp	Lys	Glu	His	Leu	Leu	Thr	Ser	Thr	Arg	Glu	Ile	Leu	Pro	Ser	
			325						330					335		
Gln	Ser	Gly	Pro	Ala	Gln	Asp	Ser	Leu	Leu	Gly	Ser	Ser	Gly	Ser	Ser	
			340					345					350			
Gly	Pro	Glu	Pro	Lys	Val	Ala	Ser	Pro	Ala	Lys	Ser	Arg	Pro	Pro	Asn	
		355					360					365				
Ser	Val	Leu	Pro	Arg	Pro	Ser	Ser	Ala	Asn	Ser	Ile	Ser	Ser	Ser	Thr	
	370					375					380					
Ser	Ser	Asn	His	Ser	Gly	His	Thr	Pro	Glu	Pro	Pro	Leu	Pro	Pro	Val	
385					390					395					400	
Gly	Gly	Asp	Leu	Ala	Ser	Arg	Leu	Ser	Ser	Asp	Glu	Gly	Glu	Met	Asp	
			405						410					415		
Gly	Ala	Asp	Glu	Ser	Glu	Lys	Leu	Asp	Cys	Gln	Phe	Ser	Thr	His	His	
			420					425					430			
Pro	Arg	Pro	Leu	Ala	Phe	Cys	Ser	Phe	Gly	Ser	Arg	Leu	Met	Gly	Arg	
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Gly	Tyr	Tyr	Val	Phe	Asp	Arg	Arg	Trp	Asp	Arg	Phe	Arg	Phe	Ala	Leu	
	450				455					460						
Asn	Ser	Met	Val	Glu	Lys	His	Leu	Asn	Ser	Gln	Met	Trp	Lys	Lys	Ile	
465					470					475					480	
Pro	Pro	Ala	Ala	Asp	Ser	Pro	Met	Pro	Ser	Pro	Ala	Ala	His	Ile	Thr	
			485					490				495				
Thr	Pro	Val	Pro	Ala	Ser	Val	Leu	Gln	Pro	Phe	Ser	Asn	Pro	Ser	Ala	
			500					505					510			
Val	Tyr	Leu	Pro	Ser	Ala	Pro	Ile	Ser	Ser	Arg	Leu	Thr	Ser	Ser	Tyr	
		515					520					525				
Ile	Met	Thr	Ser	Ala	Met	Leu	Ser	Asp	Ala	Ala	Phe	Val	Thr	Ser	Pro	
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625 630 635 640
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 645 650 655
 Ala Leu Asn Ser Tyr Gln Ala Ala Pro Pro Tyr Asn Ser Leu Ser Val
 660 665 670
 His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro
 675 680 685
 Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln
 690 695 700
 Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro
 705 710 715 720
 Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala
 725 730 735
 Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg
 740 745 750
 Lys Asn Ser Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro
 755 760 765
 Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro
 770 775 780
 Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn
 785 790 795 800
 Ser Ser Leu Ala Leu Ser Gln Ser Ser Pro Ser Ser Ile Ser Ser Pro
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 Gly His Ser Arg Gln Asn Thr Asn Arg Thr Gly Arg Ile Arg Thr Leu
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<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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 180
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 240
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 300
 aacatggcga gcaaggggca tgtctcagcc ctgtttgtga tacagctctt ttagccctgc
 360
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 420
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 480
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 660
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<210> 3200

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3200

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Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
		35					40					45			
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
	50					55				60					
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
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Trp	Ser	Cys	Leu	Pro	His	Cys	Ser	Ser	Arg	Arg	Val				
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<210> 3201

<211> 390

<212> DNA

<213> Homo sapiens

<400> 3201

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 300
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<210> 3202

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3202

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Lys	Gly	His	Ala	Ala	Ala	Gly	Val	Ser	Thr	Ala	Lys	Pro	Thr	Ala	Phe		
			20					25					30				
Gly	Thr	Glu	Val	Ser	Ser	Cys	Thr	Gly	Ala	Arg	Ile	Pro	Asn	Thr	Ala		
		35					40					45					
Val	Ala	Glu	Gly	Pro	Gly	Gly	Val	Gln	Val	Pro	Asn	Pro	Ser	Glu	Pro		
	50					55					60						
Asp	Pro	Asp	Met	Gly	Pro	Val	Ser	Trp	Gly	Pro	Pro	Leu	Cys	Pro	Val		
65					70					75					80		
Val	Ala	Asp	Pro	Glu	Arg	Glu	Gly	Cys	Gly	Asp	Ala	His	Met	Thr	Leu		
			85					90					95				
Gly	Ser	Gln	Arg	Gln	Pro	Leu	Leu	Thr	Leu	Arg	Val	Pro	Gly	Ala	Ser		
			100					105					110				
Gln	Glu	Gly	Arg														
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<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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960

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<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

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			20					25					30		
His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala	Arg
		35					40					45			
Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys	Trp
	50					55				60					
Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys	Ala
65					70				75					80	
Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His	Leu
			85					90					95		
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg	Ala
		100					105						110		
Trp	Gln	Arg	Gly	Ala	Phe	His	Arg	Pro	Val	Leu	Gly	Gly	Phe	Arg	Glu

115 120 125
 Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu
 130 135 140
 Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala
 145 150 155 160
 Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
 165 170 175
 Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
 180 185 190
 Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
 195 200 205
 Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
 210 215 220
 Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
 225 230 235 240
 Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
 245 250 255
 Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
 260 265 270
 Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
 275 280 285
 Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
 290 295 300
 Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
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 Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala
 325 330 335
 Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu
 340 345 350
 Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
 355 360 365
 Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe
 370 375 380
 Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly
 385 390 395 400
 Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala
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 Asn Tyr Val Glu Cys Val Gly Ala
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<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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 1482

<210> 3206
 <211> 494
 <212> PRT
 <213> Homo sapiens

<400> 3206
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 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

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Ala Gln Asp Ser Glu Pro Lys Ser Phe Ser Ala Pro Ala Thr Gln Ala
  65      70      75      80
Tyr Gly His Glu Ile Pro Leu Arg Asn Gly Thr Leu Gly Gly Ser Phe
      85      90      95
Val Ser Pro Ser Pro Leu Ser Thr Ser Ser Pro Ile Leu Ser Ala Asp
      100      105      110
Ser Thr Ser Val Gly Ser Phe Pro Ser Gly Glu Ser Ser Asp Gln Gly
      115      120      125
Pro Arg Thr Pro Thr Gln Pro Leu Leu Glu Ser Gly Phe Arg Ser Gly
      130      135      140
Ser Leu Gly Gln Pro Ser Pro Ser Ala Gln Arg Asn Tyr Gln Ser Ser
  145      150      155      160
Ser Pro Leu Pro Thr Val Gly Ser Ser Tyr Ser Ser Pro Asp Tyr Ser
      165      170      175
Leu Gln His Phe Ser Ser Ser Pro Glu Ser Gln Ala Arg Ala Gln Phe
      180      185      190
Ser Val Ala Gly Val His Thr Val Pro Gly Ser Pro Gln Ala Arg His
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Arg Thr Val Gly Thr Asn Thr Pro Pro Ser Pro Gly Phe Gly Trp Arg
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Ala Ile Asn Pro Ser Met Ala Ala Pro Ser Ser Pro Ser Leu Ser His
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His Gln Met Met Gly Pro Pro Gly Thr Gly Phe His Gly Ser Thr Val
      245      250      255
Ser Ser Pro Gln Ser Ser Ala Ala Thr Pro Gly Ser Pro Ser Leu
      260      265      270
Cys Arg His Pro Ala Gly Val Tyr Gln Val Ser Gly Leu His Asn Lys
      275      280      285
Val Ala Thr Thr Pro Gly Ser Pro Ser Leu Gly Arg His Pro Gly Ala
      290      295      300
His Gln Gly Asn Leu Ala Ser Gly Leu His Ser Asn Ala Ile Ala Ser
  305      310      315      320
Pro Gly Ser Pro Ser Leu Gly Arg His Leu Gly Gly Ser Gly Ser Val
      325      330      335
Val Pro Gly Ser Pro Cys Leu Asp Arg His Val Ala Tyr Gly Gly Tyr
      340      345      350
Ser Thr Pro Glu Asp Arg Arg Pro Thr Leu Ser Arg Gln Ser Ser Ala
      355      360      365
Ser Gly Tyr Gln Ala Pro Ser Thr Pro Ser Phe Pro Val Ser Pro Ala
      370      375      380
Tyr Tyr Pro Gly Leu Ser Ser Pro Ala Thr Ser Pro Ser Pro Asp Ser
  385      390      395      400
Ala Ala Phe Arg Gln Gly Ser Pro Thr Pro Ala Leu Pro Glu Lys Arg
      405      410      415
Arg Met Ser Val Gly Asp Arg Ala Gly Ser Leu Pro Asn Tyr Ala Thr
      420      425      430
Ile Asn Gly Lys Val Ser Ser Pro Val Ala Ser Gly Met Ser Ser Pro
      435      440      445
Ser Gly Gly Ser Thr Val Ser Phe Ser His Thr Leu Pro Asp Phe Ser
      450      455      460
Lys Tyr Ser Met Pro Asp Asn Ser Pro Glu Thr Arg Ala Lys Val Lys

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<210> 3207
<211> 495
<212> DNA
<213> Homo sapiens
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<210> 3208
<211> 107
<212> PRT
<213> Homo sapiens
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<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens
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<400> 3209

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120
gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg
180
ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt
240
gtctgtcttg gcccggtggg tcacctgtg ttcactcttc tcccagccat ggcctctcaa
300
actgggggttt tegtctccct atgaggggggt cctgggtatgt acgcgt
346

<210> 3210

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5					10					15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
			35				40					45			
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50					55					60				
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65					70				75					80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
				85					90					95	

<210> 3211

<211> 1728

<212> DNA

<213> Homo sapiens

<400> 3211

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tggacaaaag attccaagtc gatagcccag gccaaagaaa gcgcagggga caactccagt
120
gtttccttgg ccatactgca agccagtccg aaggaccagg gactctatta ctgctgcac
180
aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
240
ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt
300
caaagaagac ttcctccatg acagctactt tggggggccgc ctgcgtgggtc agatcgccac
360
ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca
420

cggcctcatg cctgtcttca aacctggcca tgccgtgtgtg ctttaaggtgc acaatgccat
 480
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgccca
 540
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc
 660
 tgagaacaat atcccgtatg ctacagtgga ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa
 780
 atgttgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tggtgacgga
 840
 catgcaaggt gtaggaatga agctaactga cgttggcata gcaacgctgg ctaaagggta
 900
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaaag cactacacca
 960
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca
 1020
 gaagcagccg agcattggga aaagcaaagt tcaaacaac tctatgacag taaagaaggc
 1080
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact
 1140
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag
 1200
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa
 1260
 acccatcacc tgctgtcttc actcaaata tttcagaaca ggatttgca ccagggttat
 1320
 ggggagattg aatcaacgat tgggtctcaa gacagtccat tctttatata catgttttagc
 1380
 atttttacca acctcacatc atgtgtatat ttgtgtattt gcacatgggt gtgctgtcga
 1440
 ggacctggtg ctgagaagag tctgttcaca gccaaaatc tttccactgt cattcctaac
 1500
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg
 1560
 atcaagttgt tccactgggt tctaatacgc tattgttgcc ggaggtgggt tctgtgacgt
 1620
 gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt
 1680
 taaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa
 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

Ser	Gly	Asn	Ile	Lys	Leu	Ser	Tyr	Gln	Phe	Ser	Glu	Ile	His	Glu	Asp
1				5				10				15			
Ser	Thr	Val	Cys	Trp	Thr	Lys	Asp	Ser	Lys	Ser	Ile	Ala	Gln	Ala	Lys

```

                20                25                30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
                35                40                45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
                50                55                60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65                70                75                80
Leu Ser Ser His Thr Glu Tyr
                85

```

<210> 3213

<211> 348

<212> DNA

<213> Homo sapiens

<400> 3213

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acgcgtgaag gggaagcggc ggggtagtaa cagattatgg gcaacagtcc ttttaattaa
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tctaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca
120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agtttttaaag ctcacggct ggttttggt
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtagcga ttctaggaat tgaagcagga atctttcaga tactttcta
348

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<210> 3214

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3214

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Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
1                5                10                15
Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
                20                25                30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
                35                40                45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
50                55                60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65                70                75                80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
                85                90

```

<210> 3215

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3215

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 60
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 120
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag
 180
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgacccaggg
 300
 accagcccgc cacacctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc
 360
 caagccaacg cccccgtgta tcagcagaac gtcctgcaca ccgggaagag gtggttcatc
 420
 atctgtccgg tgcttgagcc ccccgcccc gagggccctt gaattcttcgc cccacttcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc
 540
 ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc
 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

Thr	Arg	Ala	Arg	Ser	Arg	Gln	Glu	Arg	Ala	Ser	Arg	Pro	Arg	Leu	Thr
1				5					10					15	
Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35					40					45			
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50					55					60				
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65					70				75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85						90					95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
		100						105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
	115					120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135					140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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120
accataacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca
180
gatgtggggc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat
240
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatggt tgtgcagcga
300
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatttgag
360
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg
420
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag
480
tcctttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt
540
ttgtaaaaca gaagtccag agcacagaag gtcacatca caagcaaact ttattaaaaa
600
aaaactagaa gtgtgctttg attttgctgt tatttgtttt atcacttcta tatttggtga
660
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag
720
ccagagtga tgatactaca agttgagcat ctctaattca aaaatctgaa atccagaagc
780
ttcaaaatct gaatcttttt gagcactgac ttgacccac aagtggaaaa tccccaccc
840
gacacctttg ctttctgatg gttcagttta aacagatttt gtttcttgca caaaattttt
900
gtataaatta ctttcaggct atatgtataa ggtggatgtg aaacatgaat tatgtaatta
960
gagtcgggtc ccgttggtga tatgcagata ttccaaacct gaaatccaaa acacttctgg
1020
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1080
gttggttagaa atgtttaagt tgctgttctg tgatgaatct aaatcttttc tcttgctacc
1140
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1260
tatatgctaa aaattttggg gaatatgttt tgggatgtat tatggagcta aaactctaac
1320
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1380
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1560
taggaaaact tttcattaca tacttgttta aactctgtct tccagggtaa aaataataag
1620

gttgaatcat tttattaaaa atactttttta agaaaataac tatgaacatc tgaatattaa
 1680
 agatataaaa atgcacataa ttcataatttc aggtgggtatt tgcattcagt gccttactgg
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 1800
 tcattttttg tacttgaata ttctaaataa aactgacatt tactcttgac aaataaaaaca
 1860
 tatattttact aaaaaaaaaa aaaaaaaacc tcgtgccgaa ttcggagagt ctaggaatac
 1920
 tgttaaagga aaaaaaagag gggggaagat caggtcatac tatctactct cctcatctct
 1980
 aacagctcag gatctcttag cattttaatt agatgtaatt gtttgtcttt aactgtcaaa
 2040
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 2100
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 2160
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 2220
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 2280
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 2340
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 2400
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 2460
 aactggggat tgggtgggca ggaaaagggtg atatccattc tttctgataa ctagatgggtg
 2520
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 2570

<210> 3218

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3218

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Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro
		50				55					60				
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
					70					75				80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
				85					90					95	
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
			100					105					110		
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Ala
145			150		155	
Ser	Phe	Leu	Ala	Thr	Gly	Ser
		165		170		175
Asn	Ser	Asn	Phe	Leu		
		180				

<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

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tcctctggac gccacgttgt cccagcccag gttcatgtca atgggtggng cgttacatct
120
gagcgggaga cagacatcct ggacgatgaa ttgccaaacc aggatgggtca cagtgcgggc
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240
gaggccctgt cccactgac caacggctctg gacaagtct accccatgga gcctatggtc
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360
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420
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480
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540
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600
cagcagcagc agcagcctcg cccacctcca cgccagcagg aaagagccca cttggagagt
660
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720
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780
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840
ccgggggctt ggccaggggc ttctccactc tcctcccagc cctctcttgg atcctcccgt
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cagtcccatc cactgaccca gtccagatct ggctatatcc ccagtgggca ttcgttggga
960
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1020
ccttatgact atcagccatg tttggctggg cctaaccagg atttccattc aaagagccca
1080
gcctcttcct ccttgccctg cttccttccg accaccaca gcctccagg gcctcagcaa
1140

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 1200
 tcagaccctt cccggactcc agaggaggag ccattgaatt c
 1241

<210> 3220
 <211> 413
 <212> PRT
 <213> Homo sapiens

<400> 3220
 Ala Arg His Val Pro His Pro Ala Pro Gln Val Pro Pro Ser Arg Gly
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 Leu Gly Cys Ala Ser Ser Gly Arg His Val Val Pro Ala Gln Val His
 20 25 30
 Val Asn Gly Gly Xaa Val Thr Ser Glu Arg Glu Thr Asp Ile Leu Asp
 35 40 45
 Asp Glu Leu Pro Asn Gln Asp Gly His Ser Ala Gly Ser Met Gly Thr
 50 55 60
 Leu Ser Ser Leu Asp Gly Val Thr Asn Ile Ser Glu Gly Gly Tyr Pro
 65 70 75 80
 Glu Ala Leu Ser Pro Leu Thr Asn Gly Leu Asp Lys Ser Tyr Pro Met
 85 90 95
 Glu Pro Met Val Asn Gly Gly Gly Tyr Pro Tyr Glu Ser Ala Ser Arg
 100 105 110
 Ala Gly Pro Ala His Ala Gly His Thr Ala Pro Met Arg Pro Ser Tyr
 115 120 125
 Ser Ala Gln Glu Gly Leu Ala Gly Tyr Gln Arg Glu Gly Pro His Pro
 130 135 140
 Ala Trp Pro Gln Pro Val Thr Thr Ser His Tyr Ala His Asp Pro Ser
 145 150 155 160
 Gly Met Phe Arg Ser Gln Ser Phe Ser Glu Ala Glu Pro Gln Leu Pro
 165 170 175
 Pro Ala Pro Val Arg Gly Gly Ser Ser Arg Glu Ala Val Gln Arg Gly
 180 185 190
 Leu Asn Ser Trp Gln Gln Gln Gln Gln Gln Gln Gln Pro Arg Pro
 195 200 205
 Pro Pro Arg Gln Gln Glu Arg Ala His Leu Glu Ser Leu Val Ala Ser
 210 215 220
 Arg Pro Ser Pro Gln Pro Leu Ala Glu Thr Pro Ile Pro Ser Leu Pro
 225 230 235 240
 Glu Phe Pro Arg Ala Ala Ser Gln Gln Glu Ile Glu Gln Ser Ile Glu
 245 250 255
 Thr Leu Asn Met Leu Met Leu Asp Leu Glu Pro Ala Ser Ala Ala Ala
 260 265 270
 Pro Leu His Lys Ser Gln Ser Val Pro Gly Ala Trp Pro Gly Ala Ser
 275 280 285
 Pro Leu Ser Ser Gln Pro Leu Ser Gly Ser Ser Arg Gln Ser His Pro
 290 295 300
 Leu Thr Gln Ser Arg Ser Gly Tyr Ile Pro Ser Gly His Ser Leu Gly
 305 310 315 320
 Thr Pro Glu Pro Ala Pro Arg Ala Ser Leu Glu Ser Val Pro Pro Gly
 325 330 335
 Arg Ser Tyr Ser Pro Tyr Asp Tyr Gln Pro Cys Leu Ala Gly Pro Asn

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<210> 3221
<211> 1585
<212> DNA
<213> Homo sapiens
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2428

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 1260
 tccactgagg agctaaatca gaactgcaca ctcttccct gatgatagag gaagtggaag
 1320
 tgccttttagg atggtgatac tgggggaccg ggtagtgctg gggagagata ttttcttatg
 1380
 tttattcgga gaatttggag aagtgattga acttttcaag acattggaaa caaatagaac
 1440
 acaatataat ttacattaaa aaataatttc taccaaaatg gaaaggaaat gttctatgtt
 1500
 gttcaggcta ggagtatatt ggttcgaaat cccagggaaa aaaaataaaa ataaaaaatt
 1560
 aaaggattgt tgataaaaaa aaaaa
 1585

<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

Leu	Leu	Ala	Val	Leu	Arg	Pro	Arg	Arg	Ser	Arg	Lys	Arg	His	Val	Gln
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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
			35				40					45			
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
	50					55					60				
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65				70						75				80	
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85					90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100					105					110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
		115					120						125		
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
	130					135						140			
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145				150						155					160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
				165					170					175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
		195					200					205			
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
	210					215					220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
225				230						235				240	
Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

<210> 3224

<211> 224
 <212> PRT
 <213> Homo sapiens

<400> 3224
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 1 5 10 15
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 35 40 45
 Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
 50 55 60
 Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
 65 70 75 80
 Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
 85 90 95
 Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
 100 105 110
 Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
 115 120 125
 Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
 130 135 140
 Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
 145 150 155 160
 Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
 165 170 175
 Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
 180 185 190
 Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
 195 200 205
 Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
 210 215 220

<210> 3225
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 3225
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 120
 agaggaacat tttaaattggc ctacgtccat gcaccttctt tattcaagaa gctaccaaga
 180
 attctgcctg tttcccagtc cctaaaatgc ctgtgccatg tgccctgggt gaagaactag
 240
 tcccatgcca caggggtaca ggccccgctg tagtttggcc agcccaaccg cagcaagggg
 300
 aagtggaacc acagcctcaa cccacacaga ggatggaacc accttctgca gctaaaaata
 360
 accacaccgc ctttgaggtg agccacccaa gatgcaggtg gggctgtatg aaactccacg
 420

aacatgggat gagtttcatt ttcaggggtc cgaggggcca tgagtggtag caagatccct
 480
 ggaggtgccc ttggtttccc atgtag
 506

<210> 3226
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 3226
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 1 5 10 15
 Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala
 20 25 30
 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu
 35 40 45
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala
 50 55 60
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg
 65 70 75 80
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val
 85 90 95
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly
 100 105 110
 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp
 115 120 125
 Pro Trp Arg Cys Pro Trp Phe Pro Met
 130 135

<210> 3227
 <211> 1623
 <212> DNA
 <213> Homo sapiens

<400> 3227
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 120
 gtgttttcctt cccgccagge aagtgcctt agaaaccggg ccccgcccc ttctggcct
 180
 gcattcccat cccctctccc ggggaggagg tgaggacctc cttggttctt ttggttctgt
 240
 cagtgaagccc cttccttggc catgaagctc gtgaggaaga acatcgagaa ggacaatgcg
 300
 ggccaggtga ccctggtccc cgaggagcct gaggacatgt ggcacactta caacctcgtg
 360
 caggtggggc acagcctgcg cgcctccacc atccgcaagg tacagacaga gtcctccacg
 420
 ggcagcgtgg gcagcaaccg ggtccgcact accctcactc tctgcgtgga ggccatcgac
 480
 ttcgactctc aagcctgcca gctgcgggtt aaggggacca acatccaaga gaatgagtat
 540

gtcaagatgg gggcttacca caccatcgag ctggagccca accgccagtt caccctggcc
 600
 aagaagcagt gggatagtgt ggtactggag cgcatcgagc aggcctgtga cccagcctgg
 660
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 720
 cccagcatga ccctcactcg ggccaagggtg gaggtgaaca tccctaggaa aaggaaaggc
 780
 aattgctctc agcatgaccg ggccttggag cggttctatg aacagggtgt ccaggctatc
 840
 cagcgccaca tacactttga tgttgtaaag tgcattcctgg tggccagccc aggatttgtg
 900
 agggagcagt tctgcgacta catgtttcaa caagcagtga agaccgacaa caaactgctc
 960
 ctggaaaacc ggtccaaatt tcttcaggta catgcctcct ccggacacaa gtactccctg
 1020
 aaagaggccc tttgtgaccc tactgtggct agccgccttt cagacactaa agctgctggg
 1080
 gaagtcaaag ccttggatga cttctataaa atgttacagc atgaaccgga tcgagctttc
 1140
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 1200
 agcgatgagc tcttcaggca tcaggatgta gccacacgga gccggtatgt gaggctgggtg
 1260
 gacagtgtga aagagaatgc aggcaccgtt aggatattct ctagtcttca cgtttctggg
 1320
 gaacagctca gccagttgac tggggtagct gccattctcc gcttccctgt tcccgaactt
 1380
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 1500
 tgcaagaatg gcactttttg attcatacag ggatttctta tgtctttggc tacactagat
 1560
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 1620
 aaa
 1623

<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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Thr	Leu	Val	Pro	Glu	Glu	Pro	Glu	Asp	Met	Trp	His	Thr	Tyr	Asn	Leu
			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
		35					40					45			
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50					55				60					
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

65					70					75				80	
Leu	Arg	Val	Lys	Gly	Thr	Asn	Ile	Gln	Glu	Asn	Glu	Tyr	Val	Lys	Met
				85					90					95	
Gly	Ala	Tyr	His	Thr	Ile	Glu	Leu	Glu	Pro	Asn	Arg	Gln	Phe	Thr	Leu
			100					105					110		
Ala	Lys	Lys	Gln	Trp	Asp	Ser	Val	Val	Leu	Glu	Arg	Ile	Glu	Gln	Ala
		115					120					125			
Cys	Asp	Pro	Ala	Trp	Ser	Ala	Asp	Val	Ala	Ala	Val	Val	Met	Gln	Glu
	130					135					140				
Gly	Leu	Ala	His	Ile	Cys	Leu	Val	Thr	Pro	Ser	Met	Thr	Leu	Thr	Arg
145					150					155					160
Ala	Lys	Val	Glu	Val	Asn	Ile	Pro	Arg	Lys	Arg	Lys	Gly	Asn	Cys	Ser
			165					170						175	
Gln	His	Asp	Arg	Ala	Leu	Glu	Arg	Phe	Tyr	Glu	Gln	Val	Val	Gln	Ala
		180						185						190	
Ile	Gln	Arg	His	Ile	His	Phe	Asp	Val	Val	Lys	Cys	Ile	Leu	Val	Ala
		195					200					205			
Ser	Pro	Gly	Phe	Val	Arg	Glu	Gln	Phe	Cys	Asp	Tyr	Met	Phe	Gln	Gln
	210					215					220				
Ala	Val	Lys	Thr	Asp	Asn	Lys	Leu	Leu	Leu	Glu	Asn	Arg	Ser	Lys	Phe
225					230					235					240
Leu	Gln	Val	His	Ala	Ser	Ser	Gly	His	Lys	Tyr	Ser	Leu	Lys	Glu	Ala
			245					250						255	
Leu	Cys	Asp	Pro	Thr	Val	Ala	Ser	Arg	Leu	Ser	Asp	Thr	Lys	Ala	Ala
		260						265					270		
Gly	Glu	Val	Lys	Ala	Leu	Asp	Asp	Phe	Tyr	Lys	Met	Leu	Gln	His	Glu
		275				280						285			
Pro	Asp	Arg	Ala	Phe	Tyr	Gly	Leu	Lys	Gln	Val	Glu	Lys	Ala	Asn	Glu
	290					295					300				
Ala	Met	Ala	Ile	Asp	Thr	Leu	Leu	Ile	Ser	Asp	Glu	Leu	Phe	Arg	His
305					310					315					320
Gln	Asp	Val	Ala	Thr	Arg	Ser	Arg	Tyr	Val	Arg	Leu	Val	Asp	Ser	Val
			325					330						335	
Lys	Glu	Asn	Ala	Gly	Thr	Val	Arg	Ile	Phe	Ser	Ser	Leu	His	Val	Ser
			340					345					350		
Gly	Glu	Gln	Leu	Ser	Gln	Leu	Thr	Gly	Val	Ala	Ala	Ile	Leu	Arg	Phe
		355				360						365			
Pro	Val	Pro	Glu	Leu	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Ser	Glu	Glu
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Asp
385

<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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120
ggcgggctaa ggtgcgcgtg ctcgctgggt ctaacccttc tggtgggcgt ttctgctgag
180

aggcgggagg cgctgagagt ctgtgcggag gtccgtggac agactgcttt gctcgttggt
 240
 gctcttcgga ggcggcgatc cccgaaggcg agctgaaata cggctgcagg ctacaatttg
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 600
 gaagacagga cacctctgat caaggctgta caactgagga aggaggcttg tgcaactctt
 660
 ctgctgcaaa atggcgccga tccaaatatt acggatgtct ttggaaggac tgctctgcac
 720
 tacgctgtgt ataatgaaga tacatccatg atagaaaaac ttctttcaca tggtagaaat
 780
 attgaagaat gcagcaagaa tgaatatcag ccactgttac ttgctgtgag tcgaagaaaa
 840
 gtgaaaatgg tggaaatttt attaaagaaa aaagcaaatg taaatgccat tgattatctt
 900
 ggcagatcag cctcactact tgctgttact cttggagaaa aagatatagt cattcttctt
 960
 ctgcagcaca atattgatgt gttttctcga gatgtgtatg gaaagctt
 1008

<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

Met	Glu	Asp	Gly	Lys	Arg	Glu	Arg	Trp	Pro	Thr	Leu	Met	Glu	Arg	Leu
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Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50					55				60					
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65					70					75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
				85				90					95		
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100				105					110			
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
		115				120					125				
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
	130					135					140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

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145          150          155          160
Ser Lys Asn Glu Tyr Gln Pro Leu Leu Leu Ala Val Ser Arg Arg Lys
          165          170          175
Val Lys Met Val Glu Phe Leu Leu Lys Lys Lys Ala Asn Val Asn Ala
          180          185          190
Ile Asp Tyr Leu Gly Arg Ser Ala Leu Ile Leu Ala Val Thr Leu Gly
          195          200          205
Glu Lys Asp Ile Val Ile Leu Leu Leu Gln His Asn Ile Asp Val Phe
          210          215          220
Ser Arg Asp Val Tyr Gly Lys Leu
225          230

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<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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120
taacagtcgc ggagccggcc gcgtcgtgag ggggtcggca cggggagtcg ggcggtcttg
180
tgcatcttgg ctacctgtgg gtcgaagatg tcggacatcg gagactgggt caggagcatc
240
ccggcgatca cgcgctattg gttcgccgcc accgtcgccg tgcccttggt cggcaaactc
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420
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480
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540
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660
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720
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780
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840
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900
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960
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1080

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tcagtacgag acaaagtttc ttaaatcccg aagaaaaata taagtgttcc acaagtttca
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 1200
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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

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Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
			20					25					30		
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
		35					40					45			
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50				55						60				
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65					70					75				80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
				85					90				95		
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
			100					105					110		
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser
		115					120					125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130					135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145					150					155				160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
				165					170					175	
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
			180					185					190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
		195					200					205			
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210					215					220				
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His
225					230					235				240	
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
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<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

<400> 3233

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 120
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 180
 aaggaacgtt atgaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca
 240
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 300
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 360
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gattttctaa ttacaaattc
 420
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 480
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 540
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 600
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 660
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 720
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 780
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacggtcca caagcaattc
 840
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 960
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 975

<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

Xaa	Ala	Tyr	Val	Val	Glu	Leu	Cys	Val	Phe	Thr	Ile	Phe	Gly	Asn	Glu
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Glu	Asn	Gly	Lys	Thr	Val	Val	Tyr	Leu	Val	Ala	Phe	His	Leu	Phe	Phe
			20					25					30		
Val	Met	Phe	Val	Trp	Ser	Tyr	Trp	Met	Thr	Ile	Phe	Thr	Ser	Pro	Ala
		35					40					45			
Ser	Pro	Ser	Lys	Glu	Phe	Tyr	Leu	Ser	Asn	Ser	Glu	Lys	Glu	Arg	Tyr
	50					55					60				
Glu	Lys	Glu	Phe	Ser	Gln	Glu	Arg	Gln	Gln	Glu	Ile	Leu	Arg	Arg	Ala
65					70					75				80	
Ala	Arg	Ala	Leu	Pro	Ile	Tyr	Thr	Thr	Ser	Ala	Ser	Lys	Thr	Ile	Arg

				85					90					95					
Lys	Glu	Lys	Asn	Glu	Ile	Ile	Ala	Arg	Leu	Glu	Glu	Lys	Thr	Asn	Lys				
			100					105					110						
Ile	Thr	Ala	Ala	Met	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Gln	Ala	Glu				
		115					120					125							
Lys	Ala	Gln	Met	Glu	Ala	Glu	Asp	Glu	Asp	Glu	Lys	Tyr	Leu	Gln	Glu				
	130					135					140								
Cys	Leu	Ser	Lys	Ser	Asp	Ser	Leu	Gln	Lys	Gln	Ile	Ser	Gln	Lys	Glu				
145					150				155						160				
Lys	Gln	Leu	Val	Gln	Leu	Glu	Thr	Asp	Leu	Lys	Ile	Glu	Lys	Glu	Trp				
			165					170						175					
Arg	Gln	Thr	Leu	Gln	Glu	Asp													
			180																

<210> 3237

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3237

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120
gatgaggacc gttgggaagt acgggggggac cgcaaggccc ggaagcccct ggtggagaag
180
aagcgacgcg cgcggatcaa cgagagtctt caggagttgc ggctgctgct ggcgggcgcc
240
gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacggtgcg gcgggtccag
300
ggtgtgctgc ggggcccggc gcgcgagcgc gaggagctgc aggcggaagc gagcgagcgc
360
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420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg
480
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcgggggc acctagagcc
540
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600
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660
gctcctgctg agggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa
720
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780
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840
cctggaagtc tcccaggtct tccctccctc ctctgatgga tggcttgagc ggcagcccct
900
ggtaaccagc ccagtcaggc ccagccccg tttcttaaga aacttttagg gaccctgcag
960
ctctggagtg ggtggagggg gggagctacg ggcaggagga agaattttgt agagctgcca
1020

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gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga
 1080
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa aaaaaagctt
 1140
 gaacttgcca cttcagcggg gagatgagag gcagggtgcac tcagctgcac tgcccagagc
 1200
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca
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 1320
 acg
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

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Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
		20						25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
	35						40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55					60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70				75					80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
			85						90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
		100						105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
	115						120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165					170						175	
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
		180						185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195						200					205			
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235				240	
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
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<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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120
ggtttggtcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa gggtgctatc
180
caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtaac accgatgctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttcagcggt
360
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420
gcccgattgg gt
432

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<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu Gly Val Leu Leu
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Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu Ala Val Ile Thr
          20           25           30
Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu Leu Phe Phe Val
          35           40           45
Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile Gln Asp Arg Val
          50           55           60
Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr Thr Gly Met Leu
65           70           75           80
Asn Ala Val Asn Leu Phe Pro Val Leu Arg Ala Val Ser Asp Gln Glu
          85           90           95
Ser Gln Asp Gly Leu Tyr Gln Lys Trp Gln Met Met Leu Ala Tyr Ala
          100          105          110
Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met Ile Phe Ser Ser
          115          120          125
Val Cys Tyr Trp Thr Leu Gly Leu His Pro Glu Val Ala Arg Leu Gly
          130          135          140

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<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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 120
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc
 180
 acagacatgc tcccaggaca ctcgacagca aggaggtacg gcgggcccag ccagccaagg
 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg
 300
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggctccctc agccccacac
 360
 cccaccagg caggagcggg gcctggcccg gggcaggcgg gtgggagagc tctactgagt
 420
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 480
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 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

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Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65				70					75					80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100					105							

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 120
 tttgaggcaa aggtaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc
 180
 cttcgagttg ggtggtctgt tgatttttcc cgtccacagc ttggtgaaga tgaattctct
 240
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
 300

acttttgggg agaatgatgt tattggctgc tttgctaatt ttgagactga agaagtagaa
 360
 ctttccttct ccaagaatgg agaagacctt ggtgtggcat tctggatcag caaggattcc
 420
 ctggcagacc gggcccttct accccatgtc ctctgcaaaa attgtgttgt agaattaaac
 480
 ttcggtcaga aggaggagcc cttcttccca ccaccagaag agtttgtgtt cattcatgct
 540
 gtgcctgttg aggagcgtgt acgcactgca gtccctccca agaccataga ggaatgtgag
 600
 gtgattctga tgggtgggact acccggtatct ggaaagacct agtgggcact gaaatatgca
 660
 aaagaaaacc ctgagaaaag atacaatgtc ctgggagctg agactgtgct caatcaaagt
 720
 aggatgaagg gtctcgagga gccagagatg gaccccaaaa gccgagacct tttagtccag
 780
 caagcctccc agtgccttag taagctgggc cagattgctt cccggacaaa gaggaacttt
 840
 attcttgatc agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag
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 944

<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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Phe	Ser	Glu	Lys	Phe	Pro	Thr	Leu	Trp	Ser	Gly	Ala	Arg	Ser	Thr	Tyr
			20					25					30		
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
			35				40					45			
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
			50			55					60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65					70					75				80	
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
				85					90					95	
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
			100					105					110		
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
			115				120					125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
			130			135					140				
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
145				150					155					160	
Phe	Gly	Gln	Lys	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val	
			165					170					175		
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
			180				185						190		
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

	195						200						205						
Gly	Ser	Gly	Lys	Thr	Gln	Trp	Ala	Leu	Lys	Tyr	Ala	Lys	Glu	Asn	Pro				
	210						215					220							
Glu	Lys	Arg	Tyr	Asn	Val	Leu	Gly	Ala	Glu	Thr	Val	Leu	Asn	Gln	Met				
225					230					235					240				
Arg	Met	Lys	Gly	Leu	Glu	Glu	Pro	Glu	Met	Asp	Pro	Lys	Ser	Arg	Asp				
			245						250					255					
Leu	Leu	Val	Gln	Gln	Ala	Ser	Gln	Cys	Leu	Ser	Lys	Leu	Val	Gln	Ile				
		260					265					270							
Ala	Ser	Arg	Thr	Lys	Arg	Asn	Phe	Ile	Leu	Asp	Gln	Cys	Asn	Val	Tyr				
	275					280					285								
Asn	Ser	Gly	Gln	Arg	Arg	Lys	Leu	Leu	Leu	Phe	Lys	Thr	Phe	Ser	Arg				
	290					295					300								
Lys	Val	Val	Val	Val	Val	Pro	Asn	Glu	Glu										
305					310														

<210> 3245

<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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 120
 ccaaccacgc agggcctctg agagacaagg tacatcccat gattctagca caggaagaag
 180
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 240
 cggggcgccc tgctcctggc agactacatc ctgttccgac aggacctctt ccgaggatgt
 300
 acagcgctgg agctcggggc cggcacgggg ctcgctagca tcatcgcagc caccatggca
 360
 cggaccgttt attgtacaga tgtcgggtga gatcttttgt ccatgtgcca gcgaaacatt
 420
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 480
 tggctgaagg acgacctctg cacagatccc aaggccccct tcagttgggtc acaagaggaa
 540
 atttctgacc tgtacgatca caccaccatc ctgtttgcag ccgaagtgtt ttacgacgac
 600
 gacttgactg atgctgtggt taaaacgctc tcccgactcg cccacagatt gaaaaatgcc
 660
 tgcacagcca tactgtcggg ggagaagagg ctcaacttca cactgagaca cttggacgtc
 720
 acatgtgaag cctacgatca ctcccgctcc tgctgcacg cgctggagca gctcacagat
 780
 ggcaagctgc gcttcgtggt ggagcccgtg gaggcctcct tcccacagct cctggtttac
 840
 gagcgcctcc agcagctgga gctctggaag atcatcgag aaccagtaac atgacccatc
 900
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 960

ctcaccaaaag caaaaaaaaaa
980

<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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Asp Leu Phe Arg Gly Cys Thr Ala Leu Glu Leu Gly Ala Gly Thr Gly
 20           25           30
Leu Ala Ser Ile Ile Ala Ala Thr Met Ala Arg Thr Val Tyr Cys Thr
 35           40           45
Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu
 50           55           60
Asn Ser His Leu Ala Ala Thr Gly Gly Gly Ile Val Arg Val Lys Glu
 65           70           75           80
Leu Asp Trp Leu Lys Asp Asp Leu Cys Thr Asp Pro Lys Val Pro Phe
 85           90           95
Ser Trp Ser Gln Glu Glu Ile Ser Asp Leu Tyr Asp His Thr Thr Ile
100           105           110
Leu Phe Ala Ala Glu Val Phe Tyr Asp Asp Asp Leu Thr Asp Ala Val
115           120           125
Phe Lys Thr Leu Ser Arg Leu Ala His Arg Leu Lys Asn Ala Cys Thr
130           135           140
Ala Ile Leu Ser Val Glu Lys Arg Leu Asn Phe Thr Leu Arg His Leu
145           150           155           160
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala
165           170           175
Leu Glu Gln Leu Thr Asp Gly Lys Leu Arg Phe Val Val Glu Pro Val
180           185           190
Glu Ala Ser Phe Pro Gln Leu Leu Val Tyr Glu Arg Leu Gln Gln Leu
195           200           205
Glu Leu Trp Lys Ile Ile Ala Glu Pro Val Thr
210           215

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<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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120
aggttcaaca gcggcacgta taacaaccag tggatgatcg tggactacaa ggcgttcac
180
ccgggtgggc ccagccccgg gagccgggtg cttaccatcc tggagcagat ccccggcacg
240
gtgggtgggtg ctgacaagac ctcggagctc taccagaaga cctactgggc cagctacaac
300

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ataccgtcct tcgagactgt gttcaatgcc agtgggctgc aggccttagt ggcccagtat
 360
 ggggactggt tttcttatga cgggagcccc cgggcccaga tcttcggcg gaaccagtca
 420
 ctggtacaag acatggactc catggtcagg ctgatgaggt acaatgactt cctccatgac
 480
 cctctgtcac tgtgcaaagc ctgcaacccc cagcccaatg gggagaatgc tatctccgcc
 540
 cgctccgacc tcaaccgggc caatggctcc tacccttcc aggcctacg tcagcgctcc
 600
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 660
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 720
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 780
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 840
 acccccgtcc caaggccacc ggacttctaa ctccagcccc tcctgggggc ttcgttctct
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 960
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 977

<210> 3248

<211> 260

<212> PRT

<213> Homo sapiens

<400> 3248

Asn	Pro	Ala	Leu	Trp	Lys	Tyr	Val	Arg	Pro	Arg	Gly	Cys	Val	Leu	Glu
1				5					10					15	
Trp	Val	Arg	Asn	Ile	Val	Ala	Asn	Arg	Leu	Ala	Ser	Asp	Gly	Ala	Thr
			20					25					30		
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
		35				40						45			
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
	50					55					60				
Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
65					70					75					80
Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
				85					90					95	
Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
			100					105					110		
Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
		115				120						125			
Arg	Ala	Gln	Ile	Phe	Arg	Arg	Asn	Gln	Ser	Leu	Val	Gln	Asp	Met	Asp
	130					135					140				
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
145					150					155					160
Ser	Leu	Cys	Lys	Ala	Cys	Asn	Pro	Gln	Pro	Asn	Gly	Glu	Asn	Ala	Ile
			165					170					175		
Ser	Ala	Arg	Ser	Asp	Leu	Asn	Pro	Ala	Asn	Gly	Ser	Tyr	Pro	Phe	Gln

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<210> 3249
<211> 4487
<212> DNA
<213> Homo sapiens
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2448

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1260
gccaggctgc agagagacaa tgagcggctg cagagggagc tggagagctc tgcggagaag
1320
gctggccgca ttgagaagct ggaaagcgaa atccagcggc tctctgaggc ccatgagagc
1380
ctgaccagag cctcctccaa gcgtgaggcc ctggagaaga ccatgcggaa caagatggac
1440
agtgaatga ggaggctgca agacttcaac cgggatctta gagagagatt ggaatctgca
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1680
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1800
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1920
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2100
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<211> 849

<212> PRT

<213> Homo sapiens

<400> 3250

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Phe	His	Gln	Ser	Asn	Asn	Gly	Asn	Pro	Gly	Lys	Pro	Ser	Pro	Phe	Pro	20	25	30	
Trp	Val	Pro	Thr	Asp	Cys	Phe	Ser	Leu	Ser	Leu	Ser	Pro	Pro	His	Ser	35	40	45	
Arg	Cys	Ser	Gly	Ala	Arg	Cys	His	Arg	Pro	Leu	Ser	Arg	Gln	Leu	Cys	50	55	60	
Ala	Ser	Gln	Arg	Ser	Met	Trp	Thr	Leu	Glu	Asp	Ser	Ser	Gly	Thr	Val	65	70	75	80
Leu	His	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly	Asn	Leu	Thr	Glu	85	90	95	
Thr	Arg	Thr	Leu	Ala	Ile	Gln	Gln	Gln	Ala	Leu	Arg	Gly	Gly	Ala		100	105	110	
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Pro	Glu	Asp	Ser	Gln	Val	Leu	Gln	Gln	Ala	Thr	Arg	Gln	Glu	Pro	Gln	130	135	140	
Gly	Gln	Glu	His	Gln	Gly	Gly	Glu	Asn	His	Leu	Ala	Glu	Asn	Thr	Leu	145	150	155	160
Tyr	Arg	Leu	Cys	Pro	Gln	Pro	Ser	Lys	Gly	Glu	Glu	Leu	Pro	Thr	Tyr	165	170	175	
Glu	Glu	Ala	Lys	Ala	His	Ser	Gln	Tyr	Tyr	Ala	Ala	Gln	Gln	Ala	Gly	180	185	190	
Thr	Arg	Pro	His	Ala	Gly	Asp	Arg	Asp	Pro	Arg	Gly	Ala	Pro	Gly	Gly	195	200	205	
Ser	Arg	Arg	Gln	Asp	Glu	Ala	Leu	Arg	Glu	Leu	Arg	His	Gly	His	Val	210	215	220	
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Ala	Arg	Ala	Pro	Ser	His	Met	Ser	Ser	Ser	His	Ser	Phe	Pro	Gln	Leu	245	250	255	
Ala	Arg	Asn	Gln	Gln	Gly	Pro	Pro	Leu	Arg	Gly	Pro	Pro	Ala	Glu	Gly	260	265	270	
Pro	Glu	Ser	Arg	Gly	Pro	Pro	Pro	Gln	Tyr	Pro	His	Val	Val	Leu	Ala	275	280	285	
His	Glu	Thr	Thr	Thr	Ala	Val	Thr	Asp	Pro	Arg	Tyr	Arg	Ala	Arg	Gly	290	295	300	
Ser	Pro	His	Phe	Gln	His	Ala	Glu	Val	Arg	Ile	Leu	Gln	Ala	Gln	Val	305	310	315	320
Pro	Pro	Val	Phe	Leu	Gln	Gln	Gln	Gln	Gln	Tyr	Gln	Tyr	Leu	Gln	Gln				

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 405 410 415
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 Met Asp Ser Glu Met Arg Arg Leu Gln Asp Phe Asn Arg Asp Leu Arg
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 <211> 254
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr
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 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly
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 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu
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 Arg Glu Glu Ile Ala Arg Gln Ala Lys Met Ala Asp Glu Ala Ile
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 Leu Gln Glu Arg Glu Arg Gly Gly Pro Glu Glu Gly Val Arg Gly Gly
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 Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu
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 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu
 180 185 190
 Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp
 195 200 205
 Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu
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<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
			35				40					45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
			50				55					60			
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65					70					75				80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
				85					90					95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
			100					105					110		
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
			115				120					125			
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
			130				135					140			
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
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Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
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Pro	Phe	Tyr	Gln												
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<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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 180
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 540
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 720
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<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

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Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55					60				
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70					75				80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85						90					95	
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
		100						105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
	115					120						125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130					135					140				
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
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 <211> 122
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 35 40 45
 Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
 50 55 60
 Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
 65 70 75 80
 Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
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<210> 3259
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 <212> DNA
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<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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Leu	Val	His	Leu	Met	Thr	Ser	Asn	Pro	Lys	Ile	Leu	Tyr	Ala	Pro	Ala
			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35					40					45			
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50				55						60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90						95	
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
			100					105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115					120					125			
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130					135					140				
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145				150				155						160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170					175		
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180
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185

190

<210> 3261

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3261

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120
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240
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300
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480
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720
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1320

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1323

<210> 3262
<211> 81
<212> PRT
<213> Homo sapiens

<400> 3262
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Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu
20 25 30
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val
35 40 45
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn
50 55 60
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
65 70 75 80
Leu

<210> 3263
<211> 1128
<212> DNA
<213> Homo sapiens

<400> 3263
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120
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180
gccaggaaac ctggccagaa ggagaagaga gtgcggcccc aggagaagca acaagccaag
240
cccgtgaagg tggagcggac ccggaagcgg tccgagggt tctcgatgga caggaaggta
300
gagaagaaga aagagccctc cgtggaggag aagctgcaga agctgcacag tgagatcaag
360
tttgccctaa aggtcgacag cccggacgtg aaggggtgcc tgaatgccct agaggagctg
420
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480
aagaagattc gccgttacaa agcgaacaag gacgtaatgg agaaggcagc agaagtctat
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720
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780

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 960
 ctcaggetgc ccctctcctt ccccggtctg caggagagca gagcagagaa ctgtggggaa
 1020
 cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt
 1080
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 1128

<210> 3264
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 3264
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 20 25 30
 Ser Ser Asp Ser Glu Pro Glu Ala Glu Leu Glu Arg Glu Ala Lys Lys
 35 40 45
 Ser Ala Lys Lys Pro Gln Ser Ser Thr Glu Pro Ala Arg Lys Pro
 50 55 60
 Gly Gln Lys Glu Lys Arg Val Arg Pro Glu Glu Lys Gln Gln Ala Lys
 65 70 75 80
 Pro Val Lys Val Glu Arg Thr Arg Lys Arg Ser Glu Gly Phe Ser Met
 85 90 95
 Asp Arg Lys Val Glu Lys Lys Lys Glu Pro Ser Val Glu Glu Lys Leu
 100 105 110
 Gln Lys Leu His Ser Glu Ile Lys Phe Ala Leu Lys Val Asp Ser Pro
 115 120 125
 Asp Val Lys Gly Cys Leu Asn Ala Leu Glu Glu Leu Gly Thr Leu Gln
 130 135 140
 Val Thr Ser Gln Ile Leu Gln Lys Asn Thr Asp Val Val Ala Thr Leu
 145 150 155 160
 Lys Lys Ile Arg Arg Tyr Lys Ala Asn Lys Asp Val Met Glu Lys Ala
 165 170 175
 Ala Glu Val Tyr Thr Arg Leu Lys Ser Arg Val Leu Gly Pro Lys Ile
 180 185 190
 Glu Ala Val Gln Lys Val Asn Lys Ala Gly Met Glu Lys Glu Lys Ala
 195 200 205
 Glu Glu Lys Leu Ala Gly Glu Glu Leu Ala Gly Glu Glu Ala Pro Gln
 210 215 220
 Glu Lys Ala Glu Asp Lys Pro Ser Thr Asp Leu Ser Ala Pro Val Asn
 225 230 235 240
 Gly Glu Ala Thr Ser Gln Lys Gly Glu Ser Ala Glu Asp Lys Glu His
 245 250 255
 Glu Glu Gly Arg Asp Ser Glu Glu Gly Pro Arg Cys Gly Ser Ser Glu
 260 265 270
 Asp Leu His Asp Ser Val Arg Glu Gly Pro Asp Leu Asp Arg Pro Gly

BNSDOCID: <WO 0058473A2_I_>

<400> 3267

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120
cattgtggga agtttcaaga tgccttggag ccattgctca gctgggtggc agataccgag
180
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc
240
caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt
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caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact
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393

<210> 3268

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
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Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
			20					25					30		
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35					40					45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
		50				55					60				
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65					70				75					80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
				85					90					95	
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
			100					105					110		
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120						125		
Arg	Trp	Thr													
		130													

<210> 3269

<211> 1423

<212> DNA

<213> Homo sapiens

<400> 3269

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120
aaatatagga tgtggaagcg aaaaaatattc tgggtagcaa gtgaggtgta ctcaaaaata
180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac
 240
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 300
 tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccggt gtttctcttt
 360
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 420
 atttgaagac aagaagggtg agctgaaaga gaacctgatt gctgagctag aagaaaagaa
 480
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggagggtgaa
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 600
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 660
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 780
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 840
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 1260
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 1320
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 1380
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 1423

<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5				10						15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

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      35              40              45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
  50              55              60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
  65              70              75              80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
      85              90              95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
      100              105              110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
      115              120              125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
      130              135              140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
  145              150              155              160
Phe Val Ile Arg Arg Arg Ser Ala Ala
      165

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<210> 3271

<211> 464

<212> DNA

<213> Homo sapiens

<400> 3271

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  120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagatagga aatgcagctg
  180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
  240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
  300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
  360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
  420
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  464

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<210> 3272

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3272

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Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
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Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20              25              30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35              40              45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

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50		55		60
Ile Leu Ala Ala Thr	Ile Ile Gly Ser Leu	Ala Ala Gly Ala Leu Leu		
65	70	75	80	
Ile Ser Cys Ile Ala Tyr	Leu Leu Val Thr Arg	Asn Trp Arg Gly Gln		
	85	90	95	
Ser His Arg Leu Pro Ala	Pro Arg Gly Gln Gly	Ser Leu Ser Ile Leu		
	100	105	110	
Cys Ser Ala Val Ser Pro	Val Pro Ser Val Thr	Pro Ser Thr Trp Met		
	115	120	125	
Ala Thr Thr Glu Lys Pro	Glu Leu Gly Pro Ala	His		
130	135	140		

<210> 3273

<211> 387

<212> DNA

<213> Homo sapiens

<400> 3273

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ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
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120
aagtgcagaa ggcctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
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attctctttg tgacatttct cctagga
387

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<210> 3274

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3274

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Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn	
	20 25 30
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr	
	35 40 45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr	
	50 55 60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu	
65	70 75 80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn	
	85 90 95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly	
	100 105 110
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu	

2468

<210> 3276
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3276
 Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys Gln Ala Gly
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 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile
 20 25 30
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu
 35 40 45
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro
 50 55 60
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys
 65 70 75 80
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr
 85 90 95
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg
 100 105 110

<210> 3277
 <211> 1435
 <212> DNA
 <213> Homo sapiens

<400> 3277
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 120
 cagacttccg tctccttaaa atgttcatgc gtaagtgcgt ggcagaagcg gctcaagcgc
 180
 actcgtgcgt cattgctgtc agggccgagg gagcgggtgca aggccgccgc gtgacgtcag
 240
 gacgccgcgg tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg
 300
 tgctcgtggc gtgttgctga tcgcctgggt gggtgttggc gtgtccctgc agcgaaggat
 360
 cctgggtggc agtgaaaaag cagtctggct cccgaggtcc accccttata cccaaggctc
 420
 cagatggcgg ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg
 480
 gtggctgggg caggccgaga gaatggcatg gagacgccga tgcacgagaa cccggagtgg
 540
 gagaaggccc gtcaggccct ggccagcatc agcaagtcag gagctgccgg cggctctgcc
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 aagtccagca gcaatggggt tgtggccagt gcaagtacgt gtcccaggca gaagcctcag
 660
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 720
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg
 780

ccggctccta tggctagcca caccacagca gccatccgca cccaacacc aagggaactct
 840
 gaaccagccc ccagtccccg gcatggatga gagcatgtcc taccaggctc cccctcagca
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 gctgccgtcg gctcagcccc ctcagccctc aaatccccca catgggggctc acacgctgaa
 960
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 1020
 acgggccagg cctatgggccc acacacctac accgaacctg ccaagcccaa gaaggcccaa
 1080
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 1140
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 1200
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 1320
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagctg ctcaaggagg
 1380
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 1435

<210> 3278

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3278

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1				5					10					15	
Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25					30		
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
			35				40					45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50				55						60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70					75				80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
				85					90					95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
				100											

<210> 3279

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 3279

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<212> DNA

<213> Homo sapiens

<400> 3283

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<210> 3284
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<400> 3284

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Cys	Ala	Phe	Arg	Met	Leu	Lys	Ala	Arg	Arg	Glu	Leu	Lys	Ala	Leu	Arg
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Ile	Glu	Ala	Arg	Ser	Ala	Glu	His	Leu	Lys	Arg	Leu	Asn	Val	Gly	Met
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<213> Homo sapiens

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<210> 3287

<211> 921

<212> DNA

<213> Homo sapiens

<400> 3287

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<210> 3288

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3288

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			20				25				30				
Ser	Cys	Ser	Phe	Ser	Phe	Gly	Leu	Ser	Lys	Tyr	Pro	Gly	Pro	Pro	Cys


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      35      40      45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
      50      55      60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
65      70      75      80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
      85      90      95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
      100      105      110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
      115      120      125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
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<210> 3289
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 <212> DNA
 <213> Homo sapiens

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<400> 3289
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420
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<210> 3290
 <211> 129
 <212> PRT
 <213> Homo sapiens

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<400> 3290
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Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
      20      25      30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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<210> 3291
<211> 1075
<212> DNA
<213> Homo sapiens
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<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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		20					25					30			
Trp	Ser	Ala	Thr	Pro	Gly	Pro	Pro	Trp	Ala	Pro	Ser	Pro	Ala	Thr	Pro
	35					40					45				
Ala	Val	Arg	Leu	Pro	Ala	Pro	Ser	Pro	Thr	Ile	Ala	Ala	Ser	Val	Pro
	50				55				60						
Pro	His	Trp	Leu	Phe	Thr	Trp	Leu	Ala	Val	Ser	Val	Ser	Gln	Pro	Gly
65			70				75						80		
Ser	Glu	Ser	Xaa	Arg	Arg	Pro	Leu	Pro	Pro	Pro	Gln	Leu	Pro	Pro	Pro
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<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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			20					25				30			
Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu
		35				40						45			
Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala
		50				55					60				
Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser
65					70					75				80	
Ser	Asn	Ser	Ala	Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg
			85						90					95	
Ser	Arg	Arg	Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr
			100					105					110		
Val	Pro	Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys
		115				120						125			
Val	Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro
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Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr
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Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val
				165				170						175	
Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	Glu	Phe	Val
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Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	Pro	Pro	Ser	Lys
		195				200						205			
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Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	Val	Ser	Pro	Gly	Arg	Met
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Arg	Gln	Phe	Asp	Asp	Leu	Phe	Arg	Gly	Glu	Thr	Gly	Lys	Asp	Arg	Glu
			245						250					255	
Lys	Ser	His	Ser	Trp	Leu	Ser	Thr	Gly	Trp	Phe	Thr	Met	Val	Ile	Ala
			260					265					270		
Val	Glu	Leu	Cys	Asp	His	Val	His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn
		275				280						285			
Tyr	Cys	Ser	Gln	Arg	Pro	Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr
	290					295					300				
Glu	Pro	Lys	Gly	Pro	Asp	Glu	Cys	Val	Thr	Tyr	Ile	Gln	Asn	Glu	His
305					310					315				320	
Ser	Arg	Lys	Gly	Asn	His	His	Arg	Phe	Ile	Thr	Glu	Lys	Arg	Val	Phe
			325						330					335	
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Thr

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 <211> 690
 <212> DNA
 <213> Homo sapiens

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<210> 3296
 <211> 120
 <212> PRT
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<400> 3296
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 35 40 45
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly
 50 55 60
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr
 65 70 75 80
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu
 85 90 95
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 100 105 110
 Ser Thr Gln Gly Pro Leu His Leu

115

120

<210> 3297

<211> 3176

<212> DNA

<213> Homo sapiens

<400> 3297

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<210> 3298

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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Val	Cys	Leu	Cys	Val	Cys	Ala	Leu	Cys	Leu	Cys	Val	Cys	Leu	Cys	Glu		
			20					25					30				
Cys	Leu	Trp	Val	Ser	Phe	Cys	Val	Cys	Val	Cys	Ile	Cys	Val	Cys	Val		
		35					40					45					
Xaa	Leu	Cys	Ala	Cys	Met	Cys	Leu	Asp	Val	Cys	Phe	Cys	Met	Cys	Leu		
	50					55					60						
Cys	Val	Cys	Leu	Tyr	Val	Cys	Ile	Cys	Val	Tyr	Val	Cys	Val	Cys	His		
65					70					75					80		
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val		
				85					90					95			
Ser	Pro	Cys	Val	Cys	Leu	Cys	Val	Cys	Ile	Cys	Xaa	Cys	Leu	Cys	Met		
			100					105					110				
Cys	Val	Arg	Gly	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Ile	Glu	Arg		
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Glu	Gly	Glu	Arg	Lys	Gly	Ala	Thr	Asp	Gly	Ser	Ala	Trp	Lys	Val	Tyr		
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Pro	His	Ser	Gln	Pro	Trp	Glu	Glu	Ser	Val	Asn	Pro	Pro	Thr	Gly	Gln		
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Asp	Gln	Leu	Trp	Trp	Cys	Leu	Ala	Asp	Ser	Gly	Asn	Val	Thr	Phe	His		
			165					170						175			
Leu	Arg	Met	Gly	Leu	His	Phe	Leu	Gly	Lys	Glu	Cys	Arg	Ser	Trp	Ser		
		180						185					190				
Leu	Lys	Glu	Cys	Phe	Phe	Phe	Pro	Phe	Val	Ile	Glu	Arg	Ala	Gln	Pro		
	195						200					205					
Cys	Val	His	Trp	Leu	Thr	Val	Thr	Asn	Leu	Arg	Val	Gly	Asp	Ser	His		
	210					215					220						
Arg	Glu	Glu	Thr	Glu	Gly	Thr	Ala	Asp	Ser	Glu	Gln	Glu	Ser	Gly	Gly		
225					230					235					240		
Thr	Ser	Leu	Pro	Leu	Gly	Pro	Asn	Pro	Gln	Leu							
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<211> 1387

<212> DNA

<213> Homo sapiens

<400> 3299

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<210> 3300

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3300

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      20           25           30
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      35           40           45
Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe
      50           55           60
Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe
      65           70           75           80
Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg
      85           90           95
Ala Arg Ser Lys Gly Ile Asn Leu Lys Leu Leu Pro Asn Gly Phe Thr
      100           105           110
Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe
      115           120           125
Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile
      130           135           140
Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro
      145           150           155           160
Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys
      165           170           175
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu
      180           185           190
Tyr Met Gln Gln Asn Leu Val Arg Tyr Tyr Glu Leu Asp Pro Tyr Lys
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<210> 3301

<211> 2109

<212> DNA

<213> Homo sapiens

<400> 3301

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<210> 3302

<211> 323
 <212> PRT
 <213> Homo sapiens

<400> 3302

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          20          25          30
Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
          35          40          45
Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
          50          55          60
Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
65          70          75          80
Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
          85          90          95
Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro
          100         105         110
Met Lys Val Lys Phe Thr His Gly Gly Thr Gly Ser Ser Gln Thr Ala
          115         120         125
Pro Thr Cys Gly Arg Glu Ser Ser Pro Arg Glu Thr Lys Leu Arg Met
          130         135         140
Ala Ser Met Glu Ser Pro Xaa Val Asn Ala Phe Pro Ala Gln Asn Asn
145         150         155         160
Tyr Gly Leu Tyr Asp Leu Leu Gly Asn Val Trp Glu Trp Thr Ala Ser
          165         170         175
Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro
          180         185         190
Gly Ser Thr Gln Leu Met Ala Leu Pro Ile Thr Gly Pro Gly Ser Pro
          195         200         205
Pro Gly Trp Ala Thr Leu Gln Ile Gln Pro Gln Thr Thr Ser Val Ser
          210         215         220
Ala Val Leu Gln Thr Gln Ala Gly Arg Gln Gly Ser Cys Lys Gln Pro
225         230         235         240
Gly Gly Asp Lys Glu Lys Ser Leu Leu Gly Ser Leu Ser Phe Pro Gly
          245         250         255
His Val Ala Asn Ser Ala Ile Pro Ser Ser Arg Ala Ser Ala Ser Gly
          260         265         270
Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
          275         280         285
His Gln Gly Arg Arg Gly Leu Ser Leu Leu Cys Phe Gly Glu Gly Ala
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<210> 3303
 <211> 699
 <212> DNA
 <213> Homo sapiens

<400> 3303

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<210> 3304

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3304

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Asp	Ala	Ser	Ala	Ser	Pro	Leu	Ser	Pro	His	Arg	Arg	Ala	Lys	Ser	Leu
		20						25					30		
Asp	Arg	Arg	Ser	Thr	Glu	Pro	Ser	Val	Thr	Pro	Asp	Leu	Leu	Asn	Phe
		35					40					45			
Lys	Lys	Gly	Trp	Leu	Thr	Lys	Gln	Tyr	Glu	Asp	Gly	Gln	Trp	Lys	Lys
	50					55					60				
His	Trp	Phe	Val	Leu	Ala	Asp	Gln	Ser	Leu	Arg	Tyr	Tyr	Arg	Asp	Ser
65				70						75				80	
Val	Ala	Glu	Glu	Ala	Ala	Asp	Leu	Asp	Gly	Glu	Ile	Asp	Leu	Ser	Ala
			85						90					95	
Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
		100						105					110		
Ile	His	Thr	Lys	Glu	Gly	Glu	Phe	Thr	Leu	Ser	Ala	Met	Thr	Ser	Gly
		115					120					125			
Ile	Arg	Arg	Asn	Trp	Ile	Gln	Thr	Ile	Met	Lys	His	Val	His	Pro	Thr
	130					135					140				
Thr	Ala	Pro	Asp	Val	Thr	Ser	Ser	Leu	Pro	Glu	Glu	Lys	Asn	Lys	Ser
145				150						155				160	
Ser	Cys	Ser	Phe	Glu	Thr	Cys	Pro	Arg	Ser	Thr	Glu	Lys	Gln	Glu	Ala
			165						170					175	
Glu	Leu	Gly	Glu	Pro	Asp	Pro	Glu	Gln	Lys	Arg	Ser	Arg	Ala	Arg	Glu

	180		185		190
Arg	Arg	Arg	Glu	Gly	Arg
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<210> 3305

<211> 2717

<212> DNA

<213> Homo sapiens

<400> 3305

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<210> 3306

<211> 319
 <212> PRT
 <213> Homo sapiens

<400> 3306

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          35          40          45
Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg
          50          55          60
Thr Ala Val Glu Phe Gln Val Met Thr Gln Thr Gln Ser Leu Ser Phe
65          70          75          80
Leu Leu Gly Ser Ser Ala Ser Leu Asp Cys Gly Phe Ser Met Ala Pro
          85          90          95
Gly Leu Asp Leu Ile Ser Val Glu Trp Arg Leu Gln His Lys Gly Arg
          100          105          110
Gly Gln Leu Val Tyr Ser Trp Thr Ala Gly Gln Gly Gln Ala Val Arg
          115          120          125
Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp
          130          135          140
Ala Ser Leu Thr Leu Pro Gly Leu Thr Ile Gln Asp Glu Gly Thr Tyr
145          150          155          160
Ile Cys Gln Ile Thr Thr Ser Leu Tyr Arg Ala Gln Gln Ile Ile Gln
          165          170          175
Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu
          180          185          190
Ala Leu Leu Pro Thr Leu Ile Cys Asp Ile Ala Gly Tyr Tyr Pro Leu
          195          200          205
Asp Val Val Val Thr Trp Thr Arg Glu Glu Leu Gly Gly Ser Pro Ala
          210          215          220
Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly
225          230          235          240
Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg
          245          250          255
Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro
          260          265          270
Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly
          275          280          285
Ser His Leu Cys Gln Gln Ser Leu Pro Ser Cys Thr Asp Val Pro Gly
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Ala Ser Glu Thr Ala Ser Thr Tyr Arg Thr Trp Ala Ala Ser Gly
305          310          315

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<210> 3307
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 3307

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<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

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Ser	Leu	His	Pro	Asp	Pro	Gly	Ala	Ser	Leu	Pro	Cys	Pro	Val	Leu	Ile
			20					25					30		
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
		35					40					45			
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
	50					55					60				
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65					70					75				80	
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
				85					90					95	
Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
			100					105					110		

<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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 737

<210> 3310
 <211> 210
 <212> PRT
 <213> Homo sapiens

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 20 25 30
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 35 40 45
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val
 50 55 60
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly
 65 70 75 80
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu
 85 90 95
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala
 100 105 110
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg
 115 120 125
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val
 130 135 140
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr
 145 150 155 160
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala
 165 170 175
 Glu Val Gly Leu Ala Gly Tyr Phe Met Asp His Thr Val Ala Phe Arg
 180 185 190
 Asp Leu Pro Val Arg Met Val Cys Ser Ser Thr Cys Tyr Arg Ala Glu
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 Thr Asn
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<210> 3311
 <211> 486
 <212> DNA
 <213> Homo sapiens

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180
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240
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300
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480
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<210> 3314

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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      20           25           30
Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly
      35           40           45
Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His
      50           55           60
His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
65           70           75           80
Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
      85           90           95
Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
      100          105          110
Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
115          120          125
Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr
      130          135          140
Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
145          150          155          160
Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
      165          170          175
Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
      180          185          190
Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
      195          200          205
Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
      210          215          220
Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr
225          230          235          240
Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys
      245          250          255
Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
      260          265          270
Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
      275          280          285
His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
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Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
305          310          315          320
Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
      325          330          335
Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
      340          345          350
Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
      355          360          365
Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
      370          375          380
Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
385          390          395          400
Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

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							420			425			430		
Phe	Thr	Ser	Ala	Gly	Gln	Ala	Ser	Lys	Asn	Ile	Ile	Gln	Pro	Pro	Ser
							435			440			445		
Cys	Val	Leu	His	Tyr	Tyr	Asn	Val	Pro	Leu	Cys	Val	Thr	Glu	Glu	Thr
							450			455			460		
Phe	Thr	Lys	Leu	Cys	Asn	Asp	His	Glu	Val	Leu	Thr	Phe	Ile	Lys	Tyr
465							470			475			480		
Lys	Val	Phe	Asp	Ala	Lys	Pro	Ser	Ala	Lys	Thr	Leu	Ser	Gly	Leu	Leu
							485			490			495		
Glu	Trp	Glu	Cys	Lys	Thr	Asp	Ala	Val	Glu	Ala	Leu	Thr	Ala	Leu	Asn
							500			505			510		
His	Tyr	Gln	Ile	Arg	Val	Pro	Asn	Gly	Ser	Asn	Pro	Tyr	Thr	Leu	Lys
							515			520			525		
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							530			535					

<210> 3315

<211> 934

<212> DNA

<213> Homo sapiens

<400> 3315

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180	aaaacatccc	tgagttcacc	accttggcc	gaagttgttc	tgccagaccc	agttgaggag
240	accagacacc	atgcagaggt	cgtgaagaag	gtgaatgaga	tgatcgtcac	ggggcagtat
300	ggcaggctct	ttgccgtggt	gcactttgcc	agccgccagt	ggaaggtgac	ctctgaagac
360	ctgatcttaa	ttggaaatga	actagacctt	gcgtgtggag	agagaattcg	actggagaag
420	gtcctgctgg	ttggggcaga	caacttcacg	ctgcttggca	agccactcct	cggaaaggat
480	cttgttcgag	tagaagccac	agtcattgaa	aagacagaat	catggccaag	aatcattatg
540	agattcagga	aaaggaaaaa	cttcaagaag	aaaagaatcg	tcacgacccc	gcagactgtc
600	ctccggataa	acagcattga	gattgctccg	tgtttgttgt	gattaccgag	ttaataacta
660	caaaaggata	aaaataaaact	cctgcttccc	aaggagacca	ggtttctgtg	ttctggttta
720	aagccgtgca	tgccctgttgt	agatagttta	actggagcag	catgtctgta	agcaccaggc
780	ccccgagcca	gagaaaacag	gaactggggg	agaatgacaa	gcatggccct	cccagggctg
840	gataaatagt	attcttgcca	gccctccacc	ccatgtggcg	gcggcagggc	ccaggggagt
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<210> 3316

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3316

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			20					25					30		
Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro	Glu	Val	Val	Leu
		35					40					45			
Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu	Val	Val	Lys	Lys
	50					55					60				
Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg	Leu	Phe	Ala	Val
65					70					75					80
Val	His	Phe	Ala	Ser	Arg	Gln	Trp	Lys	Val	Thr	Ser	Glu	Asp	Leu	Ile
				85					90					95	
Leu	Ile	Gly	Asn	Glu	Leu	Asp	Leu	Ala	Cys	Gly	Glu	Arg	Ile	Arg	Leu
			100					105					110		
Glu	Lys	Val	Leu	Leu	Val	Gly	Ala	Asp	Asn	Phe	Thr	Leu	Leu	Gly	Lys
		115					120					125			
Pro	Leu	Leu	Gly	Lys	Asp	Leu	Val	Arg	Val	Glu	Ala	Thr	Val	Ile	Glu
	130					135					140				
Lys	Thr	Glu	Ser	Trp	Pro	Arg	Ile	Ile	Met	Arg	Phe	Arg	Lys	Arg	Lys
145					150					155					160
Asn	Phe	Lys	Lys	Lys	Arg	Ile	Val	Thr	Thr	Pro	Gln	Thr	Val	Leu	Arg
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Ile	Asn	Ser	Ile	Glu	Ile	Ala	Pro	Cys	Leu	Leu					
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<210> 3317

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 3317

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180
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420

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 1320
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 1500
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<210> 3318

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3318

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Leu	Glu	Tyr	Ile	Lys	Asn	Arg	Lys	Leu	Glu	Lys	Gln	Arg	Ile	Arg	Glu
			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu

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50	55	60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile		
65	70	75
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
100	105	110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys		
225	230	235
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<210> 3319

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 3319

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600

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<210> 3320

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3320

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			20					25					30		
Glu	Tyr	Val	Arg	Trp	Met	Met	Tyr	Trp	Ile	Val	Phe	Ala	Leu	Phe	Met
		35					40					45			
Ala	Ala	Glu	Ile	Val	Thr	Asp	Ile	Phe	Ile	Ser	Trp	Phe	Pro	Phe	Tyr
		50				55				60					
Tyr	Glu	Ile	Lys	Met	Ala	Phe	Val	Leu	Trp	Leu	Leu	Ser	Pro	Tyr	Thr
65				70				75					80		
Lys	Gly	Ala	Ser	Leu	Leu	Tyr	Arg	Lys	Phe	Val	His	Pro	Ser	Leu	Ser
			85					90					95		
Arg	His	Glu	Lys	Glu	Ile	Asp	Ala	Tyr	Ile	Val	Gln	Ala	Lys	Glu	Arg
		100					105					110			
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<210> 3321
<211> 1536
<212> DNA
<213> Homo sapiens
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 1020
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<213> Homo sapiens

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 2160
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<210> 3328

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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			20					25					30		
His	Trp	Ser	Asp	Ser	Arg	Tyr	Glu	His	Val	Met	Lys	Leu	Arg	Gln	Ala
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Ala	Leu	Lys	Ser	Ala	Arg	Asp	Met	Trp	Ala	Asp	Tyr	Ile	Leu	Phe	Val
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Asp	Ala	Asp	Asn	Leu	Ile	Leu	Asn	Pro	Asp	Thr	Leu	Ser	Leu	Leu	Ile
65				70					75					80	
Ala	Glu	Asn	Lys	Thr	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Arg	Ala	Ala
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Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Met	Thr	Ser	Gln	Gly	Tyr	Tyr	Lys	Arg
		100						105					110		
Thr	Pro	Ala	Tyr	Ile	Pro	Ile	Arg	Lys	Arg	Asp	Arg	Arg	Gly	Cys	Phe
		115					120					125			
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	130					135					140				
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Ser	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Phe	Ser	Cys	Lys	Gln	Ala	Glu
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 305 310 315 320
 Glu Val Val Asp Arg Gly Leu Gln Lys Ser Leu Val Phe Glu Asp Asp
 325 330 335
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 Asp Val Glu Arg Glu Gly Leu Asp Trp Asp Leu Ile Tyr Val Gly Arg
 355 360 365
 Lys Arg Met Gln Val Glu His Pro Glu Lys Ala Val Pro Arg Val Arg
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 Asn Leu Val Glu Ala Asp Tyr Ser Tyr Trp Thr Leu Ala Tyr Val Ile
 385 390 395 400
 Ser Leu Gln Gly Ala Arg Lys Leu Leu Ala Ala Glu Pro Leu Ser Lys
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 Met Leu Pro Val Asp Glu Phe Leu Pro Val Met Phe Asp Lys His Pro
 420 425 430
 Val Ser Glu Tyr Lys Ala His Phe Ser Leu Arg Asn Leu His Ala Phe
 435 440 445
 Ser Val Glu Pro Leu Leu Ile Tyr Pro Thr His Tyr Thr Gly Asp Asp
 450 455 460
 Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His
 465 470 475 480
 Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln
 485 490 495
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 <211> 705
 <212> DNA
 <213> Homo sapiens

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 240
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 360
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<210> 3330

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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			20					25					30		
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
		35					40					45			
Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
		50				55					60				
Met	Tyr	His	Cys	Leu	Ala	Glu	Leu	Pro	Thr	Gly	Ala	Ala	Ala	Ser	Ala
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Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
				85					90					95	
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
			100					105					110		
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						135					140				
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Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
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			180					185					190		
Leu	His	Gln	Phe	Gln	Gln	Leu	Leu	Trp	Val	Leu	Gly	Leu	Leu	Val	Gly
		195					200					205			
Leu	Leu	Leu	Leu	Leu	Leu	Gly	Leu	Gly	Ala	Cys	Tyr	Thr	Trp	Arg	Arg
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<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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35 40 45
Met Ser Ser Cys Arg Val Asp Lys Pro Ser Glu Ile Val Asp Val Gly
50 55 60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
65 70 75 80
Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
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<210> 3333
<211> 2422
<212> DNA
<213> Homo sapiens

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<210> 3334
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 3334

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			20				25					30			
Ala	Ala	Val	Gln	Pro	Ala	Glu	Val	Thr	Val	Glu	Val	Gly	Glu	Asp	Leu
		35				40						45			
His	Met	His	His	Val	Arg	Asp	Arg	Glu	Met	Pro	Glu	Ala	Leu	Glu	Phe
	50					55				60					
Asn	Leu	Ser	Ala	Asn	Pro	Glu	Ser	Ser	Thr	Ile	Phe	Gln	Arg	Asn	Ser
65				70						75				80	
Gln	Thr	Glu	Ala	Leu	Glu	Phe	Asn	Pro	Ser	Ala	Asn	Pro	Glu	Ala	Ser
			85					90					95		
Thr	Ile	Phe	Gln	Arg	Asn	Ser	Gln	Thr	Asp	Val	Val	Glu	Ile	Arg	Arg
			100				105					110			
Ser	Asn	Cys	Thr	Asn	His	Val	Ser	Ala	Val	Arg	Phe	Ser	Gln	Gln	Tyr
		115					120				125				
Ser	Leu	Cys	Ser	Thr	Ile	Phe	Leu	Asp	Asp	Ser	Thr	Ala	Ile	Gln	His
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Tyr	Leu	Thr	Met	Thr	Ile	Ile	Ser	Val	Thr	Leu	Glu	Ile	Pro	His	His
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Ile	Thr	Gln	Arg	Asp	Ala	Asp	Arg	Thr	Leu	Ser	Ile	Pro	Asp	Glu	Gln
			165					170					175		
Leu	His	Ser	Phe	Ala	Val	Ser	Thr	Val	His	Ile	Met	Lys	Lys	Arg	Asn
		180					185					190			
Gly	Gly	Gly	Ser	Leu	Asn	Asn	Tyr	Ser	Ser	Ser	Ile	Pro	Ser	Thr	Pro
		195					200					205			
Ser	Thr	Ser	Gln	Glu	Asp	Pro	Gln	Phe	Ser	Val	Pro	Pro	Thr	Ala	Asn
	210					215					220				
Thr	Pro	Thr	Pro	Val	Cys	Lys	Arg	Ser	Met	Arg	Trp	Ser	Asn	Leu	Phe
225				230						235				240	
Thr	Ser	Glu	Lys	Gly	Ser	His	Pro	Asp	Lys	Glu	Arg	Lys	Ala	Pro	Glu
			245					250					255		
Asn	His	Ala	Asp	Thr	Ile	Gly	Ser	Gly	Arg	Ala	Ile	Pro	Ile	Lys	Gln
		260				265						270			
Gly	Met	Leu	Leu	Lys	Arg	Ser	Gly	Lys	Trp	Leu	Lys	Thr	Trp	Lys	Lys
	275					280						285			
Lys	Tyr	Val	Thr	Leu	Cys	Ser	Asn	Gly	Met	Leu	Thr	Tyr	Tyr	Ser	Ser
	290					295					300				
Leu	Gly	Asp	Tyr	Met	Lys	Asn	Ile	His	Lys	Lys	Glu	Ile	Asp	Leu	Gln
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120
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<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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			20					25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
			35				40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
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<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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<210> 3338
 <211> 102
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro
 50 55 60
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu
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 85 90 95
 Arg Ile Thr Pro Val Tyr
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<210> 3339
 <211> 1341
 <212> DNA
 <213> Homo sapiens

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<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
	35					40					45				
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
	50				55					60					
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 480
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 660
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 720
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<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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		20						25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
	35					40					45				
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Phe	Tyr	Gln	
	50					55				60					
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
65				70					75					80	
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90						95	
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu


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<210> 3343
<211> 594
<212> DNA
<213> Homo sapiens
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240
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594
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<210> 3344
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 3344
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 35 40 45
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
 50 55 60
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
 65 70 75 80
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
 85 90 95
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
 100 105 110
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 115 120 125
 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
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<210> 3345
 <211> 1149
 <212> DNA
 <213> Homo sapiens

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<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

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			20					25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40					45			
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65					70					75					80
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
			85						90					95	
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
			100					105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
		115					120					125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145					150					155					160
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
			165					170						175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
			180				185						190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
		195					200					205			
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

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<210> 3347

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 3347

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 <210> 3348
 <211> 288
 <212> PRT
 <213> Homo sapiens

<400> 3348

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			20					25					30		
Gln	Val	Ala	Trp	Tyr	Asn	Glu	Leu	Leu	Pro	Pro	Ala	Phe	His	Leu	Pro
		35					40					45			
Leu	Pro	Gly	Pro	Thr	Leu	Ala	Phe	Leu	Val	Leu	Ser	Thr	Pro	Ala	Met
	50					55					60				
Phe	Asp	Arg	Ala	Leu	Lys	Pro	Phe	Leu	Gln	Ser	Cys	His	Leu	Arg	Met
65					70					75				80	
Leu	Thr	Asp	Pro	Val	Asp	Gln	Cys	Val	Ala	Tyr	His	Leu	Gly	Arg	Val
				85					90					95	
Gly	Glu	Ser	Leu	Pro	Glu	Leu	Gln	Ile	Glu	Ile	Ile	Ala	Asp	Tyr	Glu
			100					105					110		

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
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 Val Ala Gly Ala Ala Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
 165 170 175
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
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 Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro
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<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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1020
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<211> 174
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<213> Homo sapiens

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Gln Gly Leu Ala Val Tyr Ala Ser Pro Glu Asn Lys Lys Leu Phe Glu
35 40 45
Glu Glu Lys Leu Leu Arg Gln Glu Gly Lys Leu Glu Lys Ile Gln Thr
50 55 60
Lys Ala Gly Glu Ala Thr Val Lys Phe Leu Lys Ser Cys Arg Leu Glu
65 70 75 80
Val Gly Met Lys Asn Asn Val Lys Trp Glu Leu Asn Pro Glu Ile Val
85 90 95
Ala Arg His Phe Phe Lys Asn Leu Gly Val Val Val Ala Pro His Thr
100 105 110
Leu Lys Leu Pro Ala Glu Pro Ile Thr Arg Trp Gly Glu Tyr Trp Cys
115 120 125
Glu Val Thr Val Asn Gly Leu Asp Thr Val Arg Val Pro Met Ser Val
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<210> 3351
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<212> DNA
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 1020
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 1140
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 1200
 ctgctggac cggtggcgc aggtctgca ggtggccatg gcctcaggag ctctgctgtg
 1260
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 1320
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<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

Met	Trp	Pro	Ser	Gln	Leu	Leu	Ile	Phe	Met	Met	Leu	Leu	Ala	Pro	Ile
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Ile	His	Gly	Gly	Lys	His	Ser	Glu	Arg	His	Pro	Ala	Leu	Ala	Ala	Ala


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                20                25                30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Gly His
      35                40                45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala His Arg Gly Gln
      50                55                60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
65                70                75                80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
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Ser

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<210> 3353
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 3353
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120
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180
cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctcaa tttgaccac
240
accatgactc acctgggcat cagcaggggc atgggcctgg gccaggcta tgatgcacca
300
gggcgtcccc ctggatacca gtaaactgtc cactgaccag cggttacccc catacccata
360
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420

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<210> 3354
 <211> 107
 <212> PRT
 <213> Homo sapiens

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<400> 3354
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Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20                25                30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35                40                45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50                55                60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
65                70                75                80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85                90                95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
      100                105

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<210> 3355
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3355
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 120
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 180
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 240
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 300
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 360
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac
 420
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 474

<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
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 20 25 30
 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
 115 120 125
 Arg Ser Phe
 130

<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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 180
 aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttggcca cttgaatgat
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 cctctgtact ggggagtcac ggagtggcgg ggctccaggg acatggcggc ggcctctgcg
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 420
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 480
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 540
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 660
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 720
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 780
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 960
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 aatgctgtgt acttggttga aagagactgt agtgtgcaga ggcgacatca gaagatcatt
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 1260
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 1320
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 1380
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 1440
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 1500
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 1620

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 1680
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 1740
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 2100
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 2160
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 2268

<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

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Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25					30		
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
	35					40						45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70					75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85					90					95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
			100					105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
	115					120						125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150						155				160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
				165					170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
			180					185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

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 420
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 480
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 540
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<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

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Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
		35					40					45			
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90						95	
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105					110		
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120						125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135						140			
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 180
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 240

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 300
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 420
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 480
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 540
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 600
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 660
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 720
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 900
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 1020
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 1040

<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
	50					55					60				
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70					75				80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85					90					95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100				105						110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Val	Ala	Pro	His	Gly	Ile	Pro	
		115				120					125				
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
	130				135						140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145		150		155		160									
Pro	Pro	Pro	Met	Leu	Gln	Ala	Cys	Ser	Val	Gln	His	Leu	Pro	Val	Pro
		165						170					175		
Tyr	Ala	Ala	Phe	Pro	Pro	Leu	Ile	Ser	Ser	Asp	Pro	Phe	Leu	Ile	His
		180						185					190		
Pro	Pro	His	Leu	Ser	Pro	His	His	Pro	Pro	His	Leu	Pro	Pro	Pro	Gly
		195					200					205			
Gln	Phe	Val	Pro	Phe	Gln	Thr	Gln	Gln	Ser	Arg	Ser	Pro	Leu	Gln	Arg
	210					215					220				
Ile	Glu	Asn	Glu	Val	Glu	Leu	Leu	Gly	Glu	His	Leu	Pro	Gly	Ala	His
225				230					235					240	
Pro	Gln	His	Pro	His	Leu	Leu	Ile	Asn	Ile	Ser	Thr				
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<210> 3363
 <211> 718
 <212> DNA
 <213> Homo sapiens

<400> 3363
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 120
 gtagctcagg agtgtctccg gagcccaactg gagaagcccc ccaacggcct cctcttcccc
 180
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 240
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 718

<210> 3364
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 3364
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 Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

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Pro Gly Leu Leu Met Glu Ser Tyr Ala Pro Ser Pro Arg Leu Gly Cys					
	35		40		45
Thr Phe Thr Asp Cys Gln Lys Phe Leu Ile Leu Leu Trp Gly Pro Gly					
	50		55		60
Lys Glu Ser Pro Thr Val Trp Ser Cys Pro Leu Asp Ser Thr His His					
65		70		75	80
Ser Gly Ser Asn Cys Thr Ser Leu Gly Ser Ser Ala Gly Cys Ile Gly					
	85		90		95
Ser Gly Leu Phe Arg Cys Cys Cys Gly Arg Thr Asp Ser Pro Arg Ala					
	100		105		110
Gly Gly Arg Gly Gly Arg Trp Gly Ala Ser Pro Val Gly Ser Gly Asp					
	115		120		125
Thr Pro Glu Leu Leu Gly Arg Gln Cys His Pro Lys Asn His Gly His					
	130		135		140
Asp Gly Val Pro Asp His Ala Gly Gln Pro Ile Pro His His Gln Arg					
145		150		155	160
Ser Trp Ala					

<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

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840

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1980
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2040
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2160
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2280
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2389

<210> 3366

<211> 624
 <212> PRT
 <213> Homo sapiens

<400> 3366

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Glu	Thr	Glu	Ser	Gly	Pro	Pro	Val	Glu	Arg	Cys	Gly	Val	Leu	Ser	Lys
			20					25					30		
Trp	Thr	Asn	Tyr	Ile	His	Gly	Trp	Gln	Asp	Arg	Trp	Val	Val	Leu	Lys
		35				40						45			
Asn	Asn	Ala	Leu	Ser	Tyr	Tyr	Lys	Ser	Glu	Asp	Glu	Thr	Glu	Tyr	Gly
	50					55					60				
Cys	Arg	Gly	Ser	Ile	Cys	Leu	Ser	Lys	Ala	Val	Ile	Thr	Pro	His	Asp
65					70					75					80
Phe	Asp	Glu	Cys	Arg	Phe	Asp	Ile	Ser	Val	Asn	Asp	Ser	Val	Trp	Tyr
				85					90					95	
Leu	Arg	Ala	Gln	Asp	Pro	Asp	His	Arg	Gln	Gln	Trp	Ile	Asp	Ala	Ile
			100					105					110		
Glu	Gln	His	Lys	Thr	Glu	Ser	Gly	Tyr	Gly	Ser	Glu	Ser	Ser	Leu	Arg
		115					120						125		
Arg	His	Gly	Ser	Met	Val	Ser	Leu	Val	Ser	Gly	Ala	Ser	Gly	Tyr	Ser
	130					135						140			
Ala	Thr	Ser	Thr	Ser	Ser	Phe	Lys	Lys	Gly	His	Ser	Leu	Arg	Glu	Lys
145					150					155					160
Leu	Ala	Glu	Met	Glu	Thr	Phe	Arg	Asp	Ile	Leu	Cys	Arg	Gln	Val	Asp
				165					170					175	
Thr	Leu	Gln	Lys	Tyr	Phe	Asp	Ala	Cys	Ala	Asp	Ala	Val	Ser	Lys	Asp
			180					185					190		
Glu	Leu	Gln	Arg	Asp	Lys	Val	Val	Glu	Asp	Asp	Glu	Asp	Asp	Phe	Pro
		195					200					205			
Thr	Thr	Arg	Ser	Asp	Gly	Asp	Phe	Leu	His	Ser	Thr	Asn	Gly	Asn	Lys
	210					215						220			
Glu	Lys	Leu	Phe	Pro	His	Val	Thr	Pro	Lys	Gly	Ile	Asn	Gly	Ile	Asp
225					230					235					240
Phe	Lys	Gly	Glu	Ala	Ile	Thr	Phe	Lys	Ala	Thr	Thr	Ala	Gly	Ile	Leu
				245					250					255	
Ala	Thr	Leu	Ser	His	Cys	Ile	Glu	Leu	Met	Val	Lys	Arg	Glu	Asp	Ser
			260					265					270		
Trp	Gln	Lys	Arg	Leu	Asp	Lys	Glu	Thr	Glu	Lys	Lys	Arg	Arg	Thr	Glu
		275					280						285		
Glu	Ala	Tyr	Lys	Asn	Ala	Met	Thr	Glu	Leu	Lys	Lys	Lys	Ser	His	Phe
	290					295					300				
Gly	Gly	Pro	Asp	Tyr	Glu	Glu	Gly	Pro	Asn	Ser	Leu	Ile	Asn	Glu	Glu
305					310					315					320
Glu	Phe	Phe	Asp	Ala	Val	Glu	Ala	Ala	Leu	Asp	Arg	Gln	Asp	Lys	Ile
				325					330					335	
Glu	Glu	Gln	Ser	Gln	Ser	Glu	Lys	Val	Arg	Leu	His	Trp	Pro	Thr	Ser
			340					345					350		
Leu	Pro	Ser	Gly	Asp	Ala	Phe	Ser	Ser	Val	Gly	Thr	His	Arg	Phe	Val
		355					360					365			
Gln	Lys	Pro	Tyr	Ser	Arg	Ser	Ser	Ser	Met	Ser	Ser	Ile	Asp	Leu	Val
	370					375					380				
Ser	Ala	Ser	Asp	Asp	Val	His	Arg	Phe	Ser	Ser	Gln	Val	Glu	Glu	Met

385					390					395				400	
Val	Gln	Asn	His	Met	Thr	Tyr	Ser	Leu	Gln	Asp	Val	Gly	Gly	Asp	Ala
				405					410					415	
Asn	Trp	Gln	Leu	Val	Val	Glu	Glu	Gly	Glu	Met	Lys	Val	Tyr	Arg	Arg
			420					425						430	
Glu	Val	Glu	Glu	Asn	Gly	Ile	Val	Leu	Asp	Pro	Leu	Lys	Ala	Thr	His
			435				440					445			
Ala	Val	Lys	Gly	Val	Thr	Gly	His	Glu	Val	Cys	Asn	Tyr	Phe	Trp	Asn
			450			455					460				
Val	Asp	Val	Arg	Asn	Asp	Trp	Glu	Thr	Thr	Ile	Glu	Asn	Phe	His	Val
465					470					475					480
Val	Glu	Thr	Leu	Ala	Asp	Asn	Ala	Ile	Ile	Ile	Tyr	Gln	Thr	His	Lys
				485				490						495	
Arg	Val	Trp	Pro	Ala	Ser	Gln	Arg	Asp	Val	Leu	Tyr	Leu	Ser	Val	Ile
			500					505					510		
Arg	Lys	Ile	Pro	Ala	Leu	Thr	Glu	Asn	Asp	Pro	Glu	Thr	Trp	Ile	Val
		515					520					525			
Cys	Asn	Phe	Ser	Val	Asp	His	Asp	Ser	Ala	Pro	Leu	Asn	Asn	Arg	Cys
	530					535					540				
Val	Arg	Ala	Lys	Ile	Asn	Val	Ala	Met	Ile	Cys	Gln	Thr	Leu	Val	Ser
545					550					555					560
Pro	Pro	Glu	Gly	Asn	Gln	Glu	Ile	Ser	Arg	Asp	Asn	Ile	Leu	Cys	Lys
				565				570						575	
Ile	Thr	Tyr	Val	Ala	Asn	Val	Asn	Pro	Gly	Gly	Trp	Ala	Pro	Ala	Ser
			580				585						590		
Val	Leu	Arg	Ala	Val	Ala	Lys	Arg	Glu	Tyr	Pro	Lys	Phe	Leu	Lys	Arg
		595					600					605			
Phe	Thr	Ser	Tyr	Val	Gln	Glu	Lys	Thr	Ala	Gly	Lys	Pro	Ile	Leu	Phe
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<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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120tgccttcccc acttcaggcc tcttagtgct aaggatgtga gaggcaaggg ctgctgggag
180agtatttttac ggactgaagg aggcgtgccg cctgcctgc cctcctactg gtggaggaag
240gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
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360

accagg

366

<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

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Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
          20           25           30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
          35           40           45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
          50           55           60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65           70           75           80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
          85           90           95
Thr Leu Phe Pro Ser Gly Thr Arg
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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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120
aagggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcattctg cagttcctca tacaaccgag agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt cttcgtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catgttggac
840
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900

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 960
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggcttttagcg
 1020
 gttcttgccct ctttttgga ttctaatgg aagctttcaa cagagcattc cttttgtcc
 1080
 tggtaaaacc ttttgttttc acctaaaccc tttctgctta gttgtatctc tgtgaaaaac
 1140
 ttgtatacac aagcgcccat gtctcacaca aatattgatg tgattattct taagtgttaa
 1200
 atcattaaca cttaaatgac ttcatgggga atattgagca gagggactgt gcttctatgc
 1260
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttcctaaa
 1320
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 1380
 attcatttat atgtcttttg attct
 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala	20	25	30	
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys	35	40	45	
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser	50	55	60	
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly	65	70	75	80
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys	85	90	95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg	100	105	110	
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln	115	120	125	
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu	130	135	140	
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val	145	150	155	160
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu	165	170	175	
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala	180	185	190	
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys	195	200	205	
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu	210	215	220	
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser				

225		230		235		240									
Asp	Leu	Asp	Lys	Ala	Tyr	Gln	Glu	Leu	Leu	Arg	Leu	Ile	Asn	Lys	Leu
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<210> 3371

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3371

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120
ggtttcaaaa gtccggtggc ctggggctgt atgggtccac cccctggggg ggttgaggaa
180
gttgctgtcg tctgaggtac tgccgtacgt gtagtctctg tccccgcttt tgccctggcc
240
aaagaagcac caagggagca tctggaccac caggctgcac accaaccctt cccagaccg
300
cgattccgac aagagacggg gcacccttca ttgcaaagag atttccccag atcctttctc
360
cttgatctac caaactttcc agatctttcc aaagctgata tcaatgggca gaatccaaat
420
atccaggtca ccatagaggt ggtcgacggt cctgactctg aagcagataa agatcagcat
480
ccggagaata agcccagctg gtcagtccca tcccccgact ggcgggcctg gtggcagagg
540
tcctgtcct tggccagggc aaacagcggg gaccaggact acaagtacga cagtacctca
600
gacgacagca acttctctaa cccccccagg ggggtgggacc atacagcccc aggccaccgg
660
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<210> 3372

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3372

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Glu	Ala	Pro	Arg	Glu	His	Leu	Asp	His	Gln	Ala	Ala	His	Gln	Pro	Phe
			20					25					30		
Pro	Arg	Pro	Arg	Phe	Arg	Gln	Glu	Thr	Gly	His	Pro	Ser	Leu	Gln	Arg
		35				40						45			
Asp	Phe	Pro	Arg	Ser	Phe	Leu	Leu	Asp	Leu	Pro	Asn	Phe	Pro	Asp	Leu

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      50              55              60
Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile
65              70              75              80
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro
      85              90              95
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp
      100             105             110
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp
      115             120             125
Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro
      130             135             140
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys
      145             150             155             160
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu
      165             170             175
Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr
      180             185             190
Arg Ser Cys Gly Tyr Ala
      195

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<210> 3373
 <211> 726
 <212> DNA
 <213> Homo sapiens

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<400> 3373
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120
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180
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240
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300
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360
cacgagcttg ggaaggacat gtcggaggcc ggcgcctgtg cgggcagaaag ctgtgtcctc
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480
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540
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600
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720
atgcat
726

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<210> 3374

<211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3374
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 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro
 35 40 45
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
 50 55 60
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
 65 70 75 80
 Gly Arg Gly Leu

<210> 3375
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 3375
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 120
 agccacctgc ctgggctttg ggggcccagc cggcatgggg agccccaggc tccagctggc
 180
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 240
 ctgggtactgt ggcgagcccc cacctggcag ccccttttcc tgtcaaagcc cctcccagcg
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 360
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 393

<210> 3376
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3376
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 Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala
 35 40 45
 Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys
 50 55 60
 Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

65 70 75 80
 His Leu Ala Ala Pro Phe Pro Val Lys Ala Pro Pro Ser Val Leu Ser
 85 90 95
 Pro Pro Gly Lys Leu Pro Ala
 100

<210> 3377
 <211> 5235
 <212> DNA
 <213> Homo sapiens

<400> 3377
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 accaccact caaggaccat ctcttcacg accatccaca cgagactcag attgtctgaa
 240
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 300
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 360
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 420
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 480
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 840
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 900
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 1080
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 1140
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 1200
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 1260

tcagggttttaa tccatatgcc cactctcttg gaggctgtcc agtagcgtca aaacttttagt
1320
gttttaatac attcacctgt tacttttgag atgaagttca cctttcttg atcacatgca
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1680
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1920
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<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
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Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
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Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
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Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
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Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
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Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
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2558

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Ser	Arg	Lys	Arg	Ser	Val	Ala	Val	Ser	Asp	Glu	Glu	Glu	Val	Glu	Glu
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Val	Glu	Val	Gly	Lys	His	Val	Val	Arg	Trp	Lys	Val	Lys	Phe	Asp	Tyr
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Val	Pro	Thr	Asp	Thr	Thr	Pro	Arg	Asp	Arg	Trp	Val	Glu	Lys	Gly	Ser
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785					790					795					
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Gln	Ala	Ile	Ala	Val	Ala	Glu	Pro	Ser	Thr	Ser	Glu	Cys	Leu	Arg	Ile
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Gln	Asn	Leu	Cys	Asn	Ser	Tyr	Gln	Ser	Arg	Ala	Asp	Ser	Arg	Ala	Lys
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Ala	Ser	Glu	Glu	Ser	Leu	Arg	Thr	Ser	Glu	Arg	Lys	Leu	Arg	Glu	Thr
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Glu	Glu	Lys	Leu	Gln	Lys	Leu	Arg	Thr	Asn	Ile	Val	Ala	Leu	Leu	Gln
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Lys	Val	Gln	Glu	Asp	Ile	Asp	Ile	Asn	Thr	Asp	Asp	Glu	Leu	Asp	Ala
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<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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<210> 3380

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

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			20					25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
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Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65					70					75				80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
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Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100						105					110		
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
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	180		185	
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser				
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225		230		235
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu				
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Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala				
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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

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			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
			35				40					45			
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
			50			55					60				
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
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Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
				85					90					95	
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
				100				105					110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
			115				120					125			
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
			130			135					140				
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
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Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
				165					170					175	
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180				185						190		
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
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Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

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Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg		
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<210> 3383
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 3383
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<210> 3384
 <211> 94
 <212> PRT
 <213> Homo sapiens

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20 25 30
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35 40 45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
50 55 60
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg
65 70 75 80
Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
85 90

<210> 3385
 <211> 720
 <212> DNA
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<400> 3385

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<211> 188

<212> PRT

<213> Homo sapiens

<400> 3386

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			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
		35					40					45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55					60				
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
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Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
		100						105					110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
	115						120					125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135					140				
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
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180

185

<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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1380

2565

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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

Ser	Gly	Arg	Gly	Leu	Leu	Leu	Gly	Leu	Trp	Trp	Arg	Arg	Arg	Arg	Thr
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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser	Ser
			20					25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35				40						45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
50					55				60						
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65				70					75					80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
			85					90						95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105					110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
			115				120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
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Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
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<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 180
 gacggggaac cttctgacca gcctcatggg ctccctcagag caggaggatg gggaggagag
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cggtcgac
308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
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Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr
20 25 30
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro
35 40 45
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro
50 55 60
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu
65 70 75 80
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His
85 90 95
Val Glu Thr Pro Arg Ser
100

<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 3391
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120
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agtcttcttc acttacaggg tgccattgaa gactggaata atgaaagcag catgccctgt
240
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300
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360
tggggaaacc atgaattcta taacttcagt agagagtatt taacacactc taaacttaac
420
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480
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540
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600
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720

ttctctgaca caaaccaaga aaaggtggtg attgtgagcc atcttcccat ttacccggac
 780
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 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1295

<210> 3392

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser	20	25	30	
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe	35	40	45	
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His	50	55	60	
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys	65	70	75	80
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr	85	90	95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg	100	105	110	
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn	115	120	125	
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu	130	135	140	
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr	145	150	155	160
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu	165	170	175	
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys	180	185	190	
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu	195	200	205	
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn				

210	215	220
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp Leu Asn Glu Val Leu Thr		
225	230	235
Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro		240
	245	250
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg		255
	260	265
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe		270
	275	280
Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val		285
	290	295
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln		300
305	310	315
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly		320
	325	330
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala		335
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Phe His Cys		350
355		

<210> 3393
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 3393
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 180
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 510

<210> 3394
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 3394
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 Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val

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<210> 3395
<211> 807
<212> DNA
<213> Homo sapiens
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120
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240
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420
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<210> 3396
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 3396
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 Leu Asn Asp Thr Tyr His Ser Arg Asp Ser Ser Phe Arg Leu Asp Ser
 35 40 45
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser
 50 55 60
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
 65 70 75 80
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
 85 90 95
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
 100 105 110
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
 115 120 125
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
 130 135 140
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
 165 170 175
 Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser
 180 185 190
 Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu
 195 200 205

<210> 3397
 <211> 492
 <212> DNA
 <213> Homo sapiens

<400> 3397
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 240
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 300
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 420

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 480
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 492

<210> 3398
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 3398
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 20 25 30
 Thr Leu Cys Ser Val Pro Ser Leu Glu Gln Gln Gln Pro Gly Xaa Ala
 35 40 45
 Ala Ser Ala Ile Pro Ser Trp Leu Leu Asn Asp Pro Gly Val Glu Xaa
 50 55 60
 Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly
 65 70 75 80
 Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu
 85 90 95
 Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly
 100 105 110
 Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala
 115 120 125
 Ala Ser Gly Cys Pro Arg Thr Glu Glu Ala Ala Trp Gly Glu Ile Leu
 130 135 140
 Arg Glu Gly Leu Ser Ser Pro Cys Ser Cys Ser Pro Gly Pro Pro Gly
 145 150 155 160
 Lys Leu Gly

<210> 3399
 <211> 5784
 <212> DNA
 <213> Homo sapiens

<400> 3399
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 180
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 240
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 300
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 360
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 420

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480
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720
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780
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1320
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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys
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Asn	Val	Leu	Ala	Ala	Ser	Ser	Glu	Tyr	Phe	Gln	Ser	Leu	Phe	Thr	Asn
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Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro
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Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu
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Phe	Pro	Thr	Cys	Pro	Asn	Arg	Lys	Lys	Val	Phe	Val	Glu	Asp	Asp	Glu
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His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu
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Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu
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Leu Ala Leu Lys Arg Pro Arg Pro Pro Val Leu Ser Val Cys Ser Ser
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Gly Glu Asp Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile
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Pro Ser Ser Gly Ser Gly Ser Gly Asn Gln Ser Ile Asp Arg Ser Gly
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Pro Leu Val Lys Ser Leu Leu Arg Arg Ser Leu Ser Met Asp Ser Gln
          340          345          350
Val Pro Val Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ser
          355          360          365
Ser Ser Val Ser Ser Asp Ala Pro Gly Asn Val Leu Cys Ala Leu Ser
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Gln Lys Ser Ser Leu Lys Asp Cys Ser Glu Lys Thr Ala Leu Asp Asp
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Gln Ser Thr Asp Arg Glu Gly Ala Ser Pro Val Thr Glu Val Arg Ile
          420          425          430
Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg
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Val Thr Val Gly Asp Ala Ala Thr Thr Ala Ala Ala Ser Ser Ser Ser
          450          455          460
Val Thr Arg Asp Leu Ser Leu Lys Thr Glu Asp Asp Gln Lys Asp Met
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Phe Lys Lys Leu Lys Val Asn Glu His Gly Ser Pro Val Ser Glu Asp
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Thr Ala Gly Leu His Arg His Val Asn Met Tyr His Asn Pro Glu Lys
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Pro Tyr Ala Cys Asp Ile Cys His Lys Arg Phe His Thr Asn Phe Lys
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Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser
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Pro Ala Ser Ser Ser His Ala Val Leu Asp Glu Lys Phe Gln Arg Lys
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Lys	Val	Ala	Lys	Pro	Lys	Glu	His	Ala	Pro	Leu	Ala	Ser	Pro	Val	Glu	
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Asn	Lys	Glu	Val	Tyr	Gln	Cys	Arg	Leu	Cys	Asn	Ala	Lys	Leu	Ser	Ser	
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Leu	Leu	Glu	Gln	Gly	Ser	His	Glu	Arg	Leu	Cys	Arg	Asn	Ala	Ser	Val	
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Cys	Pro	Tyr	Cys	Ser	Leu	Arg	Phe	Phe	Ser	Pro	Glu	Leu	Lys	Gln	Glu	
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His	Asn	Gln	Asn	Asn	Met	Ala	Pro	Thr	Glu	Asn	Phe	Ser	Leu	Pro	Val	
				805					810					815		
Leu	Asp	His	Asn	Gly	Asp	Val	Thr	Gly	Ser	Ser	Arg	Pro	Gln	Ser	Gln	
			820					825					830			
Pro	Glu	Pro	Asn	Lys	Val	Asn	His	Ile	Val	Thr	Thr	Lys	Asp	Asp	Asn	
		835					840					845				
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Ser	Cys	Leu	Pro	Glu	Asp	Leu	Ser	Leu	Ser	Lys	Gln	Leu	Lys	Ile	Gln	
865					870					875					880	
Val	Lys	Glu	Glu	Pro	Val	Glu	Glu	Ala	Glu	Glu	Glu	Ala	Pro	Glu	Ala	
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Cys	Asn	Lys	Ala	Phe	Arg	Thr	Asn	Phe	Arg	Leu	Trp	Ser	His	Phe	Gln	
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Ser	His	Met	Ser	Gln	Ala	Ser	Glu	Glu	Ser	Ala	His	Lys	Glu	Ser	Glu	
				965					970					975		
Val	Cys	Pro	Val	Pro	Thr	Asn	Ser	Pro	Ser	Pro	Pro	Pro	Leu	Pro	Pro	
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<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

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<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402

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Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
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Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
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Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105					110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
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Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
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<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
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Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
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Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
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Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
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Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
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Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
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Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
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Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180					185						190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
	195					200					205				
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
	210				215					220					
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225				230					235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
		260				265					270				
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<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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120
aacctgctcg cctccatccg taagggcaat gccattgacg aagcggacat cccgccgcca
180
gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
240
gccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
300
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<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

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20          25          30
Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35          40          45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50          55          60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65          70          75          80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85          90          95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100         105         110
Met Pro Pro Gly Pro Cys Ser Pro Pro Ser Gly Pro Val Ala Glu Pro
115         120         125
Pro Ala Arg Leu Gln Ala
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<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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120

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 180
 ccggcgggga cctttcccgg ancacctggc ctccttggca agcaggtggc ggcaccaaca
 240
 ggcccggggg ggacctttcc cggacacctg gcctcctcgg cgaggcaggt ggcagaactg
 300
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 360
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 420
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa
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<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

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Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20					25					30		
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
		35					40					45			
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
	50					55					60				
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90						95	
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
		115					120					125			
Trp	Leu	Ile													
		130													

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 180
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 240

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 300
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 360
 ctgaatgatc ctttcctctc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcggggc
 480
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 540
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 600
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 660
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 720
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 780
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 840
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 959

<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

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Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
		35				40						45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
	50				55						60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
65				70						75				80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85					90					95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
		115				120					125				
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
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<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

<400> 3411

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 120
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 420
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 840
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 958

<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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Pro	Asn	Gln	Lys	Tyr	Ser	Asp	Gln	Thr	Ile	Ser	Cys	Phe	Leu	Asn	Trp
			20					25					30		
Thr	Val	Gly	Lys	Leu	Lys	Thr	His	Leu	Ser	Asn	Val	Tyr	Pro	Ser	Lys
		35					40					45			
Pro	Leu	Thr	Lys	Asp	Gln	Arg	Leu	Val	Tyr	Ser	Gly	Arg	Leu	Leu	Pro
	50					55					60				
Asp	His	Leu	Gln	Leu	Lys	Asp	Ile	Leu	Arg	Lys	Gln	Asp	Glu	Tyr	His
65					70					75				80	
Met	Val	His	Leu	Val	Cys	Thr	Ser	Arg	Thr	Pro	Pro	Ser	Ser	Pro	Lys
				85					90					95	
Ser	Ser	Thr	Asn	Arg	Glu	Ser	His	Glu	Ala	Leu	Ala	Ser	Ser	Ser	Asn

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<210> 3413
<211> 3344
<212> DNA
<213> Homo sapiens
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2587

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1260
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1680
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<211> 723

<212> PRT

<213> Homo sapiens

<400> 3414

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		20						25				30			
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
		35				40					45				
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
	50					55					60				
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65				70					75					80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
			85						90					95	
Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
			100					105					110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
		115					120					125			
Cys	Leu	Pro	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp
		130				135					140				
Ile	Leu	Asn	Pro	Lys	Asp	Val	Ile	Thr	Thr	Arg	Phe	Glu	Asn	Ser	Tyr
145				150					155					160	
Pro	Ser	Lys	Asp	Phe	Cys	Ser	Gln	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Leu
			165					170					175		
Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
			180					185				190			
Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

2590

625		630		635		640									
Leu	Ser	Thr	Gly	Asn	Thr	Asn	Ser	Val	Leu	Lys	Gly	Ala	Val	Thr	Lys
				645					650					655	
Glu	Ala	Ala	Lys	Ile	Ile	Gln	Asp	Glu	Ser	Thr	Gln	Glu	Asp	Ala	Met
			660					665					670		
Lys	Phe	Pro	Ser	Ser	Gln	Ser	Ser	Gln	Pro	Ser	Arg	Leu	Leu	Lys	Asn
		675				680						685			
Lys	Gly	Ile	Ser	Cys	Lys	Pro	Val	Thr	Gln	Thr	Lys	Ala	Thr	Ser	Cys
	690					695					700				
Lys	Pro	His	Thr	Gln	His	Lys	Glu	Cys	Gln	Thr	Glu	Cys	Pro	Val	Arg
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<210> 3415

<211> 3501

<212> DNA

<213> Homo sapiens

<400> 3415

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1020

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<210> 3416

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3416

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Asn	Ile	Thr	His	Ile	Cys	Leu	Pro	Pro	Asp	Ser	Ser	Glu	Ala	Glu	Ile
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Ile	Asp	Glu	Ile	Leu	Lys	Ile	Asn	Glu	Asp	Thr	Arg	Val	His	Gly	Leu
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Gly Lys Lys Ile Leu Val Val Gly Ala His Gly Ser Leu Glu Ala Ala
      165              170              175
Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln
      180              185              190
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val
      195              200              205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln
      210              215              220
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys
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<210> 3417
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<212> DNA
<213> Homo sapiens

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<210> 3418
<211> 94
<212> PRT
<213> Homo sapiens

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      20      25      30
Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
      35      40      45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
      50      55      60
Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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				20				25					30		
Phe	Ser	Ser	Lys	Thr	Val	Thr	Val	Leu	Leu	Leu	Ala	Gln	Thr	Thr	Cys
		35					40					45			
Leu	Leu	Leu	Phe	Ile	Ile	Ser	Arg	Pro	Gly	Pro	Ser	Ser	Pro	Ala	Gly
	50					55					60				
Gly	Glu	Asp	Arg	Val	His	Val	Leu	Val	Leu	Ser	Ser	Trp	Arg	Ser	Gly
65					70					75					80
Ser	Ser	Phe	Leu	Gly	Gln	Leu	Phe	Ser	Gln	His	Pro	Asp	Val	Phe	Tyr
				85				90						95	
Leu	Met	Glu	Pro	Ala	Trp	His	Val	Trp	Thr	Thr	Leu	Ser	Gln	Gly	Ser
			100					105					110		
Ala	Ala	Thr	Leu	His	Met	Ala	Val	Arg	Asp	Leu	Met	Arg	Ser	Ile	Phe
		115					120					125			
Leu	Cys	Asp	Met	Asp	Val	Phe	Asp	Ala	Tyr	Met	Glu	Pro	Gly	Pro	Arg
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Arg	Gln	Ser	Ser	Leu	Phe	Gln	Trp	Glu	Asn	Ser	Arg	Ala	Leu	Cys	Ser
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Ala	Pro	Ala	Cys	Asp	Ile	Ile	Pro	Gln	Asp	Glu	Ile	Ile	Pro	Arg	Ala
				165					170					175	
His	Cys	Arg	Leu	Leu	Cys	Ser	Gln	Gln	Pro	Phe	Glu	Val	Val	Glu	Lys
			180					185					190		
Ala	Cys	Arg	Ser	Tyr	Ser	His	Val	Val	Leu	Lys	Glu	Val	Arg	Phe	Phe
	195						200					205			
Asn	Leu	Gln	Ser	Leu	Tyr	Pro	Leu	Leu	Lys	Asp	Pro	Ser	Leu	Asn	Leu
	210					215					220				
His	Ile	Val	His	Leu	Val	Arg	Asp	Pro	Arg	Ala	Val	Leu	Arg	Ser	Arg
225					230					235					240
Glu	Ala	Ala	Gly	Pro	Ile	Leu	Ala	Arg	Asp	Asn	Gly	Ile	Val	Leu	Gly
				245					250					255	
Thr	Asn	Gly	Lys	Trp	Val	Glu	Ala	Asp	Pro	His	Leu	Arg	Leu	Ile	Arg
			260					265					270		
Glu	Val	Cys	Arg	Ser	His	Val	Arg	Ile	Ala	Glu	Ala	Ala	Thr	Leu	Lys
		275					280					285			
Pro	Pro	Pro	Phe	Leu	Arg	Gly	Arg	Tyr	Arg	Leu	Val	Arg	Phe	Glu	Asp
	290					295					300				
Leu	Ala	Arg	Glu	Pro	Leu	Ala	Glu	Ile	Arg	Ala	Leu	Tyr	Ala	Phe	Thr
305					310					315					320
Gly	Leu	Thr	Leu	Thr	Pro	Gln	Leu	Glu	Ala	Trp	Ile	His	Asn	Ile	Thr
				325					330					335	
His	Gly	Ser	Gly	Ile	Gly	Lys	Pro	Ile	Glu	Ala	Phe	His	Thr	Ser	Ser
			340					345					350		
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<210> 3423
<211> 1851
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<212> DNA

<213> Homo sapiens

<400> 3423

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<210> 3424

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3424

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Gln	Arg	Trp	Val	Ile	Gly	Arg	Cys	Leu	Cys	Val	Pro	Glu	Arg	Ser	Leu
			20					25					30		
Ala	Ser	Tyr	Gly	Val	Arg	Gln	Asp	Gly	Asp	Pro	Ala	Phe	Leu	Tyr	Leu
		35				40					45				
Leu	Ser	Ala	Pro	Arg	Glu	Ala	Pro	Ala	Thr	Gly	Pro	Ser	Pro	Gln	His
	50					55				60					
Pro	Gln	Lys	Met	Asp	Gly	Glu	Leu	Gly	Arg	Leu	Phe	Pro	Pro	Ser	Leu
65					70				75					80	
Gly	Leu	Pro	Pro	Gly	Pro	Gln	Pro	Ala	Ala	Ser	Ser	Leu	Pro	Ser	Pro
				85				90					95		
Leu	Gln	Pro	Ser	Trp	Ser	Cys	Pro	Ser	Cys	Thr	Phe	Ile	Asn	Ala	Pro
		100					105					110			
Asp	Arg	Pro	Gly	Cys	Glu	Met	Cys	Ser	Thr	Gln	Arg	Pro	Cys	Thr	Trp
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Asp	Pro	Leu	Ala	Ala	Ala	Ser	Thr								
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<210> 3425

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 3425

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<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

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 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser
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 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

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			100					105					110		
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Gly	Ser	Gln	Ala	Trp	Thr	Pro	Pro	Ala	Asp	Gly	Glu	Gly	Ala	Gly	Lys
	130					135					140				
Glu	Glu	Ala	Glu	Val	Lys	Val	Glu	Gln	Glu	Arg	Glu	Ile	Glu	Ser	Glu
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				165					170					175	
Ser	Glu	Thr	Glu	Glu	Glu	Ser	Glu	Asp	Glu	Ser	Asp	Glu	Glu	Ser	Glu
			180					185					190		
Glu	Asp	Ser	Glu	Glu	Glu	Met	Glu	Asp	Glu	Gln	Glu	Ser	Glu	Ala	Glu
		195					200					205			
Glu	Asp	Asn	Gln	Glu	Glu	Gly	Glu	Ser	Glu	Ala	Glu	Gly	Glu	Thr	Glu
	210					215					220				
Ala	Glu	Ser	Glu	Phe	Asp	Pro	Glu	Ile	Glu	Met	Glu	Ala	Glu	Arg	Val
225					230					235					240
Ala	Lys	Arg	Lys	Cys	Pro	Asp	His	Gly	Leu	Asp	Leu	Ser	Thr	Tyr	Cys
				245					250					255	
Gln	Glu	Asp	Arg	Gln	Leu	Ile	Cys	Val	Leu	Cys	Pro	Val	Ile	Gly	Ala
			260					265					270		
His	Gln	Gly	His	Gln	Leu	Ser	Thr	Leu	Asp	Glu	Ala	Phe	Glu	Glu	Leu
		275					280					285			
Arg	Ser	Lys	Asp	Ser	Gly	Gly	Leu	Lys	Ala	Ala	Met	Ile	Glu	Leu	Val
	290					295					300				
Glu	Arg	Leu	Lys	Phe	Lys	Ser	Ser	Asp	Pro	Lys	Val	Thr	Arg	Asp	Gln
305					310					315					320
Met	Lys	Met	Phe	Ile	Gln	Gln	Glu	Phe	Lys	Lys	Val	Gln	Lys	Val	Ile
			325						330					335	
Ala	Asp	Glu	Glu	Gln	Lys	Ala	Leu	His	Leu	Val	Asp	Ile	Gln	Glu	Ala
		340						345					350		
Met	Ala	Thr	Ala	His	Val	Thr	Glu	Ile	Leu	Ala	Asp	Ile	Gln	Ser	His
	355						360					365			
Met	Asp	Arg	Leu	Met	Thr	Gln	Met	Ala	Gln	Ala	Lys	Glu	Gln	Leu	Asp
	370					375					380				
Thr	Ser	Asn	Glu	Ser	Ala	Glu	Pro	Lys	Ala	Glu	Gly	Asp	Glu	Glu	Gly
385					390					395					400
Pro	Ser	Gly	Ala	Ser	Glu	Glu	Glu	Asp	Thr						
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<210> 3427

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3427

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120

gggctctggat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg
 180
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 240
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 300
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 360
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 420
 tttcaggtct gacagacact ccaggggaatc ttcataccac tgtgtttcat catgattata
 480
 ccctgaagcc ccatgggtcca gttccaattc ctgaagcctt ctactgcttg cagggcctgg
 540
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<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70					75					80
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90						95	
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105						110		
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
		115					120					125			
Glu	Arg	Gly	Ser												
		130													

<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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 120
 gtcagcttcc ttttcatact ttcccggcgt tctctccacg agcaggtgca ccagggaacct
 180

gtccctctgt cctacacggt caccacagtg acgacccaag gcttcccctt gcctacaggc
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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

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Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35					40					45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50					55				60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75					80
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
				85				90						95	
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100					105					110		
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
		115					120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 120
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 180
 agcgccgcca gccgtgtcgc caacagtacc aaatcgtcgt gcagcggctt cgccccgccg
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttcctgtgct caccaccaac
 300
 gccatcggcc agtgggatct ggtgtgtgac ctgggctggc aggtgatcct ggagcagatc
 360
 ctcttcatct tgggctttgc ctccggetac ctgttcctgg gttaccccgc agacagattt
 420
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 600
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 660
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 720
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 aagcggcaga ttgaggaggc tcagtctgtg ctgaggatcc tggctgagcg aaaccggccc
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 1200
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 1260
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 1380
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 1396

<210> 3432

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
 35 40 45
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly		
65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
145	150	155
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		160
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
	195	200
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		205
210	215	220
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		225
	230	235
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		240
	245	250
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		255
	260	265
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		270
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Arg Gly Arg Gly Leu Gly Leu Ile		285
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<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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120

ccgagccact cccgttccca caccaggctg aacttgaaaa gggacgtcgc ccacctgtac
180

cgaggagtgc gctcgcgcta catcatgggg tcaggagaat ccttcattgca gctgcagcag
240

cgtctcctga gagagaagga ggccaagatc aggaaggcct tggacaggct tcgcaagaag
300

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360

tacaccaact gcggtgagca cgcgcccagg ggagggggcct tccgcggtct ccgtgtcacc
420

ggtgaggact cgccccgggg agggcagggg gtccctgtcg tctcagtggg gccgtacgac
480

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 720
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 780
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 960
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 1020
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 1080
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 1140
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 1257

<210> 3434

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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Arg	Pro	Ser	Ser	Val	Pro	Pro	Ser	Pro	Ser	Pro	Arg	Pro	Leu	Pro	Gly
			20					25					30		
Gly	Arg	Gln	Arg	Pro	Gln	Arg	Pro	Ser	His	Ser	Arg	Ser	His	Thr	Arg
		35					40					45			
Ser	Asn	Leu	Lys	Arg	Asp	Val	Ala	His	Leu	Tyr	Arg	Gly	Val	Gly	Ser
	50					55					60				
Arg	Tyr	Ile	Met	Gly	Ser	Gly	Glu	Ser	Phe	Met	Gln	Leu	Gln	Gln	Arg
65					70				75					80	
Leu	Leu	Arg	Glu	Lys	Glu	Ala	Lys	Ile	Arg	Lys	Ala	Leu	Asp	Arg	Leu
				85				90						95	
Arg	Lys	Lys	Arg	His	Leu	Leu	Arg	Arg	Gln	Arg	Thr	Arg	Arg	Glu	Phe
			100					105					110		
Pro	Val	Ile	Ser	Val	Val	Gly	Tyr	Thr	Asn	Cys	Gly	Glu	His	Ala	Pro
		115				120						125			
Arg	Gly	Gly	Ala	Phe	Arg	Gly	Leu	Arg	Val	Thr	Gly	Glu	Asp	Ser	Pro
	130					135					140				
Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
145					150					155				160	
Cys	Gly	Glu	His	Val	Pro	Arg	Arg	Gly	Gly	Ser	His	Gly	Arg	Arg	Val

				165					170					175			
Gly	Tyr	Thr	Ser	Cys	Cys	Glu	Ser	Ser	Pro	Arg	Arg	Arg	Val	Ser	Cys		
			180					185					190				
Gly	Leu	Cys	Val	Gly	Tyr	Ser	Ser	Gln	Gly	Glu	Asp	Val	Ile	Tyr	Pro		
	195					200					205						
Ile	Leu	Pro	Ser	Arg	Ala	Leu	Pro	Pro	Cys	Leu	Tyr	His	Asn	Leu	Pro		
	210					215					220						
Ser	Ile	Tyr	Thr	Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu		
225					230					235					240		
Tyr	His	His	Pro	Val	Tyr	Thr	Ile	His	Pro	Ser	Thr	Pro	Ser	Pro	Leu		
			245						250						255		
Leu	Cys	Leu	Tyr	His	Pro	Pro	Val	Tyr	Thr	Ser	Thr	Thr	Thr	Pro	Ser		
		260						265					270				
Ile	Pro	Pro	Pro	Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser		
	275						280					285					
Pro	Ser	Ser	Ala	Pro	Ser	Ser	Cys	Leu	His	Trp	His	His	Cys	Pro	Ser		
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Tyr	Thr	Thr	Thr	Pro	Ser	Thr											
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<210> 3435

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3435

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420
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840

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<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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		20						25					30		
Glu	Phe	Asn	Val	Ser	Cys	Leu	Thr	Asp	Ser	Asn	Ala	Asp	Thr	Tyr	Trp
		35					40					45			
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Lys	Gly	Thr	Ile	Val	Lys	Lys	Leu	Leu	Leu	Ala	Val	Asp	Thr	Thr	Asp
65					70					75					80
Asp	Asn	Phe	Met	Pro	Lys	Arg	Val	Val	Val	Tyr	Gly	Gly	Glu	Gly	Asp
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Asn	Leu	Lys	Lys	Leu	Ser	Asp	Val	Ser	Ile	Asp	Xaa	Arg	Pro	Ser	Ser
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Gly	Xaa	Val	Cys	Val	Leu	Glu	Asp	Met	Thr	Val	His	Leu	Pro	Ile	Ile
		115					120					125			
Glu	Ile	Arg	Ile	Val	Glu	Cys	Arg	Asp	Asp	Gly	Ile	Asp	Val	Arg	Leu
	130					135					140				
Arg	Gly	Val	Lys	Ile	Lys	Ser	Ser	Arg	Gln	Arg	Glu	Leu	Gly	Leu	Asn
145					150					155					160
Ala	Asp	Leu	Phe	Gln	Pro	Thr	Ser	Leu	Val	Arg	Tyr	Pro	Arg	Leu	Glu
			165						170					175	
Gly	Thr	Asp	Pro	Glu	Val	Leu	Tyr	Arg	Arg	Ala	Val	Leu	Leu	Gln	Arg
		180						185						190	
Phe	Ile	Lys	Ile	Leu	Asp	Ser	Val	Leu	His	His	Leu	Val	Pro	Ala	Trp
		195					200					205			
Asp	His	Thr	Leu	Gly	Thr	Phe	Ser	Glu	Ile	Lys	Gln	Val	Lys	Gln	Phe
	210					215					220				
Leu	Leu	Leu	Ser	Arg	Gln	Arg	Pro	Gly	Leu	Val	Ala	Gln	Cys	Leu	Arg
225					230					235					240
Asp	Ser	Glu	Ser	Ser	Lys	Pro	Ser	Phe	Met	Pro	Arg	Leu	Tyr	Ile	Asn
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1560
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1740
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1800
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1860
atTTTTcttg tatcgatgta gagactctat tttctcccaa agacactatt tttgcagctg
1920
tttgaagttt gtatatTTTt cgtactgcag agcttacaca aaattgaaga atgttaatgt
1980
tcgagttttt ttatcttgtg tttagagggt gttttttgca gatcttggtg ttaatagacc
2040
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2081

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<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

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Arg	Pro	Pro	Lys	Arg	Asp	Phe	Gln	Val	Glu	Ala	Thr	Thr	Ala	Glu	Asp
			20					25					30		
Glu	Ala	Glu	Pro	Gln	Trp	Glu	Arg	Glu	Gly	Ala	Arg	Phe	Thr	Thr	Pro

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<400> 3439
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120
ggggcgccgg gcgccccggg ggagcggggc cggcaccta ggggacgcaa agccccggga
180
aggggcccggc ggagggagggc cggagcgggc agcgcggcgg cgccatgtcc gtgaacatgg
240
acagagctcaa gcaccaggtc atgatcaacc agttcgtgct gacggcgggc tgcgcggccg
300
accaggcgaa gcaactgctg caggcggccc actggcagtt cgagacagcc cttagcgcct
360
ttttccagga gaccaacatc ccctacagcc accatcacca ccagatgatg tgcacccccg
420
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720
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780
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900
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ggccccggca catggagtgg ttcagagcgg cctgggtgcc tggcggacag aacttcagag
1020
accacgcagc cttccttcga agacgcacct gccagcccc gccaggggt gccgtggagg
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1140

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 1320
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 1380
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<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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Leu	Ser	Pro	Cys	Ser	Pro	Val	Ser	Arg	Pro	Pro	Arg	Ala	Ser	Thr	Ala
			20					25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
			35				40					45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
			50			55					60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
65					70				75					80	
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
				85					90					95	
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
			100					105					110		
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
			115				120					125			
Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr	Pro
			130			135					140				
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser	Ala
145					150					155				160	
Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala	Ala
			165						170					175	
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
			180					185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
			195				200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
			210			215					220				
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235				240	
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
			245						250					255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

	260		265		270									
Arg	Ser	Asn	Leu	Val	Pro	Gly	Ala	Ala	Gly	Leu	Cys	Met	Leu	Val
	275					280						285		

<210> 3441

<211> 2074

<212> DNA

<213> Homo sapiens

<400> 3441

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120
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180
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240
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300
gacatggtgc tgcagtttct gcgcacgctc ttctgcgca cgcggaatgt gcactactgc
360
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420
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480
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540
caggtgctgg gggacctgct catgatcctg tgtgacctt tcgcatcaa cacgtgggca
600
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660
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720
gacagccagg tcttcaagga gcccaagatg gaggtagagc tcatcaccag gtctctcccg
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840
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960
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1080
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1200
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1260
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1320

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cccagcccg cagaggctgc ggagacgccg gccctggagc tgcccctccc cagcgtgccc
1380
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1620
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1920
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2040
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2074

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<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

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Met Val Gly Lys Asn Val Lys Leu Tyr Asp Met Val Leu Gln Phe Leu
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Arg Thr Leu Phe Leu Arg Thr Arg Asn Val His Tyr Cys Thr Leu Arg
      20          25          30
Ala Glu Leu Leu Met Ser Leu His Asp Leu Asp Val Gly Glu Ile Cys
      35          40          45
Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
      50          55          60
Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
      65          70          75          80
Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
      85          90          95
Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
      100          105          110
Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
      115          120          125
Ser Pro Asp Leu Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
      130          135          140
Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu
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Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

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<210> 3443
<211> 2070
<212> DNA
<213> Homo sapiens
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180
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420
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480
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600
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cgagtagaga tcacaaatgt tcacagcagc cgggctcttg atgttcagtt cctggactct
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720
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780
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960
gacttgtgga agcatcagaa ggatgtgttt ttgagtgtcca tatccagtgg agctgactct
1020
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1080
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1260
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1380
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1920
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2070

<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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Ser Thr Glu Glu Asn Lys Ile Lys Val Cys Tyr Val Asp Tyr Gly Phe
      20           25           30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
      35           40           45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
      50           55           60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
      65           70           75           80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
      85           90           95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
      100          105          110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
      115          120          125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
      130          135          140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
      145          150          155          160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
      165          170          175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
      180          185          190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
      195          200          205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
      210          215          220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
      225          230          235          240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
      245          250          255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
      260          265          270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
      275          280          285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
      290          295          300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
      305          310          315          320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
      325          330          335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
      340          345          350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
      355          360          365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
      370          375          380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
      385          390          395          400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

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<210> 3445
<211> 2086
<212> DNA
<213> Homo sapiens
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120
cctgcatgcg agttggggccg cgggcgggggt tggagcctac tcggggcgac tgcgatggac
180
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240
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300
aatttcatgg acaagtacta cctggagttt gaagacacag aagagaataa actcatctac
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acacctatth ttaatgaata catttctttg gtgaaaaaat acattgaaga acagctgctg
420
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540
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720

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840
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900
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960
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1680
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1980
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2086

<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

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			20						25				30	
Met	Asp	Asp	Glu	Phe	Gln	Leu	Leu	Gln	Arg	Asn	Phe	Met	Asp	Lys Tyr
		35					40					45		
Tyr	Leu	Glu	Phe	Glu	Asp	Thr	Glu	Glu	Asn	Lys	Leu	Ile	Tyr	Thr Pro
	50				55						60			
Ile	Phe	Asn	Glu	Tyr	Ile	Ser	Leu	Val	Glu	Lys	Tyr	Ile	Glu	Glu Gln
65				70						75				80
Leu	Leu	Gln	Arg	Ile	Pro	Glu	Phe	Asn	Met	Ala	Ala	Phe	Thr	Thr Thr
			85					90					95	
Leu	His	His	Leu	Phe	Arg	Leu	Arg	His	His	Lys	Asp	Glu	Val	Ala Gly
			100					105					110	
Asp	Ile	Phe	Asp	Met	Leu	Leu	Thr	Phe	Thr	Asp	Phe	Leu	Ala	Phe Lys
		115					120					125		
Glu	Met	Phe	Leu	Asp	Tyr	Arg	Ala	Glu	Lys	Glu	Gly	Arg	Gly	Leu Asp
	130					135					140			
Leu	Ser	Ser	Gly	Leu	Val	Val	Thr	Ser	Leu	Cys	Lys	Ser	Ser	Ser Leu
145				150					155					160
Pro	Ala	Ser	Gln	Asn	Asn	Leu	Arg	His						
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<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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120
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180
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240
accagtgtgta aggtttgctg cgccttgctt atttctgagt cccagaagct ggcacattac
300
cagagcaaaa aacatgccaa caaagtgaag agatacctag caatccatgg aatggagaca
360
ttaagggggg aaacgaagaa gctagactca gatcagaaga gcagcagaag caaagacaag
420
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480
tacctgggga agaccacgc aaagaactta aagctgaagc agcagtccac taaggtggaa
540
gccttgcacc agaatagaga gatgatagac ccagacaagt tctgcagcct ctgccatgca
600
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660
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tttccagctg gaaagggcta ccctgcaaa acatgtaaga tagtgctgaa ctccatagaa
780

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cagtaccaag ctcatgtcag cggcttcaaa cacaagaacc agtcacccaaa aacagtggca
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<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65					70				75						80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85						90					95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
			100					105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145					150					155				160	
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165					170					175		
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180						185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
	195					200						205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
	210					215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225				230					235					240	
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245					250					255		
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260					265					270			
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
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Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
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<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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180
gcacactacc cggatgcacga gtgcgtcttc aagggggatg tgaggagact ctctctctc
240
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300
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360
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420
atgattacag ctcttttgag gaagcttaag cagcaatcca gggaaagtgt tgaagaaaaa
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cgacctcgat tattaagaag cctgaaagag ctaggtgact tttatctaga acttcactgg
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660
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720
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780
ggaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc
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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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Xaa Ile Phe Ser Asn His His His Arg Leu Gln Leu Lys Ala Ala Pro
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Ala Ser Ser Asn Pro Pro Gly Ala Pro Ala Leu Pro Leu His Asn Ser
          20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
          35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
          50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
          85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

```

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      100      105      110
Leu Ala His Asn Ala Pro Val Lys Val Lys Asn Ala Gln Gly Trp Ser
      115      120      125
Pro Leu Ala Glu Ala Ile Ser Tyr Gly Asp Arg Gln Met Ile Thr Ala
      130      135      140
Leu Leu Arg Lys Leu Lys Gln Gln Ser Arg Glu Ser Val Glu Glu Lys
145      150      155      160
Arg Pro Arg Leu Leu Lys Ala Leu Lys Glu Leu Gly Asp Phe Tyr Leu
      165      170      175
Glu Leu His Trp Asp Phe Gln Ser Trp Val Pro Leu Leu Ser Arg Ile
      180      185      190
Leu Pro Ser Asp Ala Cys Lys Ile Tyr Lys Gln Gly Ile Asn Ile Arg
      195      200      205
Leu Asp Thr Thr Leu Ile Asp Phe Thr Asp Met Lys Cys Gln Arg Gly
      210      215      220
Asp Leu Ser Phe Ile Phe Asn Gly Asp Ala Ala Pro Ser Glu Ser Phe
225      230      235      240
Val Val Leu Asp Asn Glu Gln Lys Val Tyr Gln Arg Ile His His Glu
      245      250      255
Ala His Ile Pro Gly Ile Arg Asp Gly Asn Arg Arg Arg Gly Gly Tyr
      260      265      270
Phe Asn Glu Gln
      275

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<210> 3451
 <211> 595
 <212> DNA
 <213> Homo sapiens

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<400> 3451
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120
gaaatattca gtaagtagtg ccctgccatt gcagggtttgg atgtccttct gccagcaaaa
180
cccagcatga acctctggct tgtggagatg tcttccagct ggaaacctga gtgagcgaag
240
ttgaactgtg agggcgccac aactgagaga agattctgcc tccgaaccct ctgaatgaga
300
gtctgaagga tctgatcttg ggttgcttta cttagtcctt cgtggtattg gtgtgtgtca
360
atgctggagt ccctcagctc cttagctgaa aagagctgaa ggggccttgg aacctggggg
420
agctgcttac tttgcaagg tttgccagc tgctgctgcg tagctggatg ggactgtctc
480
tcattaactt cctctctggg gctattttct gttgtgttgg tagctatgag cgctcccatc
540
cccctttcct cttttgcagg caggggaacc gcttccattt caactttggg gagag
595

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<210> 3452
 <211> 192
 <212> PRT

<213> Homo sapiens

<400> 3452

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Met Glu Ala Val  Pro Leu Pro Ala Lys Glu Glu Arg Gly Met Gly Ala
 1          5          10          15
Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
          20          25          30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
          35          40          45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
          50          55          60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
65          70          75          80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
          85          90          95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
          100          105          110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
          115          120          125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
          130          135          140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145          150          155          160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
          165          170          175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
          180          185          190

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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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120
gcgttagtg atacgctcac cgggataccta tccccagtag aggaggtgcg ggcggctgct
180
gaagaacaga ttaaggtgct ggaggtgacg gaggaatttg gtgttcactt ggcagaactg
240
actgtagatc cccagggggc actggcaatc cgtcagctgg catcagtcac cttgaaacaa
300
tatgtggaga ctactgggtg tgcccaatca gagaaattta ggccctcctga aactacagaa
360
agggcaaaaa ttgttatccg ggagctattg cctaattgggt tgagagaatc gataagcaaa
420
gtgcgctcca gtgtggccta tgcagtgatc gccattgccc actgggactg gcctgaa
477

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<210> 3454

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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Lys Met Ala Ala Ala Ala Ala Gly Ala Ala Ser Gly Leu Pro Gly
 20           25           30
Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly
 35           40           45
Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile
 50           55           60
Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu
 65           70           75           80
Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val
 85           90           95
Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys
100          105          110
Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu
115          120          125
Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser
130          135          140
Val Ala Tyr Ala Val Ser Ala Ile Ala His Trp Asp Trp Pro Glu
145          150          155

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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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120
cttgctcggag actgagctat tggcagtgcc ttcagctctg agctcaggca cctcgaacat
180
tggtttttgtc gtttaaggatc ctaaagtgtc gtggggagtg atcacatttt tctcaacatc
240
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gagaagaaac agcagttcag aaacctcaaa gagaaatggt ttctaactca actggccggc
420
ttcctggcca accgacagaa gaaatacaaa tatgaagagt gtaaagatct cataaaat
480
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540
gaggagctca ggcaatataa agtcctgggt cacgctcagg aacgagagct gacccagtta
600
agggagaagt tacgggaagg gagagatgcc tcccgtcat tgaatgagca tctccaggcc
660
ctcctcactc cggatgagcc ggacaagtcc caggggcagg acctccaaga acagctggct
720

```

gaggggtgta ggctggcaca gcacctcgtc caaaagctca gcccagaaaa tgacaacgat
780
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1080
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 4886

<210> 3456

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3456

Glu	Ile	Glu	Lys	Lys	Gly	Lys	Gly	Lys	Lys	Arg	Arg	Gly	Arg	Arg	Ser
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Lys	Lys	Gln	Arg	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn
			20					25					30		
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70				75					80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
			85						90					95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

115

<210> 3457

<211> 646

<212> DNA

<213> Homo sapiens

<400> 3457

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 120
 aggtgggaat gcagagtgtg tattctttgt nnatgcacct gtacacagggc tngggcgggc
 180
 aagtgaggat gcgtatgtnn gggtggctgt gtctgtatct gcatttgcac gngtgtattg
 240
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<210> 3458

<211> 61

<212> PRT

<213> Homo sapiens

<400> 3458

Thr	Arg	Asp	Phe	Val	Ser	Met	Ser	Arg	Cys	Pro	Cys	Ala	Cys	Val	Cys
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Arg	Cys	Val	Xaa	Val	Pro	Gly	Cys	Val	Cys	Ala	Cys	Val	Cys	Val	Asp
			20				25						30		
Ile	Cys	Ala	Cys	Leu	Phe	Thr	His	Arg	Trp	Glu	Cys	Arg	Val	Cys	Ile
		35				40					45				
Leu	Cys	Xaa	Cys	Thr	Cys	Thr	Gln	Ala	Xaa	Ala	Gly	Lys			
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<210> 3459

<211> 592

<212> DNA

<213> Homo sapiens

<400> 3459

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 240
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 360
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 420
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 480
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<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

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Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
			35				40					45			
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
	50					55				60					
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65					70				75					80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90					95		
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
			100					105					110		
Leu	Lys	Leu													
			115												

<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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 474

<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

Met	Ala	Leu	Leu	Glu	Ala	Ser	Ile	Gly	Val	Ala	Gly	Met	Leu	Ala	Ser
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Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
			20					25					30		
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
		35					40					45			
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55					60				
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70				75					80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
				85					90					95	
Val	Ile	Thr	Val	His											
				100											

<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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 420
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 480

caaaagaaac tttcagaata tatgaaagct ttgatcaata agaaagaact tctcagttaa
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<210> 3464

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3464

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Leu	Glu	Asp	Pro	Ala	Val	Pro	Arg	Leu	Thr	Ala	Ala	Leu	Pro	Ala
			20					25				30		
Glu	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Arg	Gln	Gly	Lys	His

35	40	45
Pro Asn Tyr Leu Met Ala	Asn Glu Arg Met Asn Leu Met Asn Met Ala	
50	55	60
Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg		
65	70	75
Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met		
85	90	95
Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly		
100	105	110
Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val		
115	120	125
Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu		
130	135	140
Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met		
145	150	155
Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu		
165	170	175
Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu		
180	185	190
Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala		
195	200	205
Asn Phe Cys Met Lys Gly Glu Asp Leu Asp Ser Gln Val Gly Val Ile		
210	215	220
Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu		
225	230	235
Gly Asp Gly Gln Ile Thr Ala Ile Leu Asp Gln Lys Asn Tyr Val Glu		
245	250	255
Glu Leu Asn Arg His Leu Asn Ala Thr Val Asn Asn Leu Gln Ala Lys		
260	265	270
Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala		
275	280	285
Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val		
290	295	300
Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys		
305	310	315
Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His		
325	330	335
Leu Lys Glu Glu Thr Gln Leu Arg Leu Asp Val Glu Lys Glu Leu Glu		
340	345	350
Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu		
355	360	365
Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln		
370	375	380
Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu		
385	390	395
Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg		
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<210> 3465

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 3465

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<210> 3466

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3466

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Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
      35           40           45
Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
      50           55           60
Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
65           70           75           80
Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
          85           90           95
Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
          100          105          110
Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
          115          120          125
Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
          130          135          140
Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
145          150          155          160
Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
          165          170          175
Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
          180          185          190
Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
          195          200          205
Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
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Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
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Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
          260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
          275          280          285
His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
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<210> 3467

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3467

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180

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<210> 3468

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3468

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Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35					40					45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
		50				55					60				
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
65					70				75					80	
Ile	Val	Leu	Asp	Cys	Phe	Ser	Ser								
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<210> 3469

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 3469

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<210> 3470

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3470

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
			35				40					45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
			50			55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
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Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
				85					90					95	
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
			100					105					110		
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
			115				120					125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
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				165				170						175	
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
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Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
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Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
	210					215					220				
Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly

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Lys	Leu	Ser	Val	Leu	Arg	Leu	Ser	Pro	Ser	Met	Gly	His	Pro	Leu	Glu
				245					250					255	
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Val	Thr	Gly	Tyr	Asp	Trp	Trp	Asp	Ile	Leu	Leu	His	Val	Gln	Pro	Ser
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Met	Val	Gln	Ser	Leu	Val	Glu	Lys	Leu	His	Glu	Glu	Tyr	Thr	Arg	Gln
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Thr	Ala	Ala	Leu	Gln	Gln	Val	Leu	Ser	Thr	Arg	Ile	Leu	Ala	Met	Lys
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			325						330					335	
Tyr	His	Thr	Lys	Leu	Phe	Leu	Ile	Ala	Ile	Ser	Ser	Thr	Leu	Lys	Ser
		340					345					350			
Leu	Leu	Arg	Pro	His	Phe	Leu	Asn	Thr	Pro	Asp	Lys	Ser	Pro	Gly	Asp
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Arg	Leu	Thr	Glu	Ile	Cys	Thr	Lys	Ile	Thr	Asp	Val	Asp	Ile	Asp	Lys
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Val	Met	Ile	Asn	Leu	Lys	Thr	Glu	Glu	Phe	Val	Leu	Asp	Met	Asn	Thr
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His	Ser	Phe	Leu	Arg	Asp	Gly	Thr	Ser	Leu	Gly	Met	Leu	Arg	Glu	Leu
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Met	Val	Val	Ile	Arg	Ile	Trp	Gly	Leu	Leu	Lys	Pro	Ser	Cys	Leu	Pro
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Val	Tyr	Thr	Ala	Thr	Ser	Asp	Thr	Gln	Asp	Ser	Met	Ser	Leu	Leu	Phe
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			485				490						495		
Ser	Glu	Pro	Asp	Glu	Ala	Leu	Val	Asp	Glu	Cys	Cys	Leu	Leu	Pro	Ser
		500				505						510			
Gln	Leu	Leu	Ile	Pro	Ser	Leu	Asp	Trp	Leu	Pro	Ala	Ser	Asp	Gly	Leu
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Val	Ser	Arg	Leu	Gln	Pro	Lys	Gln	Pro	Leu	Arg	Leu	Gln	Phe	Gly	Arg
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Ala	Pro	Thr	Leu	Pro	Gly	Ser	Ala	Ala	Thr	Leu	Gln	Leu	Asp	Gly	Leu
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Ala	Arg	Ala	Pro	Gly	Gln	Pro	Lys	Ile	Asp	His	Leu	Arg	Arg	Leu	His
			565				570					575			
Leu	Gly	Ala	Cys	Pro	Thr	Glu	Glu	Cys	Lys	Ala	Cys	Thr	Arg	Cys	Gly
		580				585						590			
Cys	Val	Thr	Met	Leu	Lys	Ser	Pro	Asn	Arg	Thr	Thr	Ala	Val	Lys	Gln
	595					600					605				
Trp	Glu	Gln	Arg	Trp	Ile	Lys	Asn	Cys	Leu	Cys	Gly	Gly	Leu	Trp	Trp
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<210> 3473

<211> 1660

<212> DNA

<213> Homo sapiens

<400> 3473

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240
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<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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			20					25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
		35					40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
65					70					75					80
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
				85					90					95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
		115					120					125			
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
	130					135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
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Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
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Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
		180						185					190		
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
		195					200					205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
	210					215					220				
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225					230					235					240
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
				245					250					255	
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
			260					265					270		
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
		275					280					285			
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
	290					295					300				
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val
305					310					315					320
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

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Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
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          355          360          365
Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
          370          375          380
Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
385          390          395          400
Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
          405          410          415
Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
          420          425          430
Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
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Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
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<210> 3475

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3475

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<210> 3476

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3476

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His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
      35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
      50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
      65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
      85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
      100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
      115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
      130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
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Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
      165                170

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<210> 3477

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3477

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120
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180
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240
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356

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<210> 3478

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3478

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Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
      20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
      35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
      50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

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65              70              75              80
Phe Leu Leu Phe Ile Lys Ser His Gly Arg Val Asp Ala Gly Gly Gln
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<210> 3479

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3479

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180
ccagtgttcc cctgggtcct cgcagactac acctcagaga cattgaactt ggcaaatccg
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660
ccaacaaagt cttgcaaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
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797

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<210> 3480

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3480

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1              5              10              15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
              20              25              30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

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<210> 3481
<211> 1794
<212> DNA
<213> Homo sapiens
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2649

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 960
 tctggccctg gccaaagcgac tagccatgct gcggggacag gaccccgaga gactgaccct
 1020
 ccaggactat cgctcccgag acagtgatga cgacgaggat gaggagacag ccatccaaag
 1080
 agtcctgcag cagctcactg aagaagcttc cctggatgag gcaagtggct ttaacatccc
 1140
 tgcagagcag gcttctcgac cctggacgca accccgcggg gcagagcctg aggcccagga
 1200
 tgtggacccc aggccctgagg ctgaggaaga ggagctcccc tgggtgctgca tctgcaatga
 1260
 ggatgccacc ctacgctgcg ctggctgcca tggggacctc ttctgtgccc gctgcttcg
 1320
 agagggccat gatgcctttg agcttaaaga gcaccagaca tctgcctact ctccctccag
 1380
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 1440
 ggcacccatt tctgggcccc gccacaggac gtccgatggg agagcttgtc tggctctact
 1500
 gatgatg_ at aggcccttc ctgagccttg gtgtccctgg aatgaggaaa gattctccat
 1560
 tcgagagaat gactgggagg gaagaagtcg gggccctcct attagaagcc cagactggaa
 1620
 gtgagaggca tgatggggag agaccagact gaatctacgg gtgagccctg taacctggct
 1680
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 1740
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 1794

<210> 3482

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
		50				55					60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65					70					75				80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85						90					95	
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

```

      115      120      125
Arg  Gln  Glu  Asn  Lys  Pro  Lys  Leu  Val  Pro  Ser  Gln  Ala  Glu  Ile  Glu
      130      135      140
Ala  Arg  Leu  Ala  Ala  Leu  Lys  Asp  Glu  Arg  Gln  Gly  Ser  Ile  Pro  Ser
145      150      155      160
Thr  Gln  Glu  Met  Glu  Ala  Arg  Leu  Ala  Ala  Leu  Gln  Gly  Arg  Val  Leu
      165      170      175
Pro  Ser  Gln  Thr  Pro  Gln  Pro  Gly  Thr  Ser  His  Thr  Gly  His  Gln  Asp
      180      185      190
Pro  Ser  Pro  Ala  Asp  Thr  Gly  Ser  Ala  Asn  Ala  Ala  Gly  Ser
      195      200      205

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<210> 3483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3483

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gacttcgagt gggctctacac cgaccagccg cacacgcagc ggcgcaagga gatactggcc
120
aagtaccggg ccatcaaggc cctgatgcgg ccagaccgcg gcctcaagtg ggcggggctg
180
gtgctgggtgc tgggtgcagat gctggcctgc tggctgggtgc gcgggctggc ctggcgctgg
240
ctgctgttct gggcctacgc ctttggtggc tgcgtgaacc actcgctgac gctggccatc
300
cacgacatct cgcacaacgc ggccttcggc acggggccgtg cggcacgcaa ccgctggctg
360
gccgtgttcg ccaacctgcc cgtgggtgtg ccctacgcg cctccttcaa gaagtaccac
420
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477

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<210> 3484

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3484

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Met  Gly  Asn  Ser  Ala  Ser  Arg  Asn  Asp  Phe  Glu  Trp  Val  Tyr  Thr  Asp
 1      5      10      15
Gln  Pro  His  Thr  Gln  Arg  Arg  Lys  Glu  Ile  Leu  Ala  Lys  Tyr  Pro  Ala
      20      25      30
Ile  Lys  Ala  Leu  Met  Arg  Pro  Asp  Pro  Arg  Leu  Lys  Trp  Ala  Gly  Leu
      35      40      45
Val  Leu  Val  Leu  Val  Gln  Met  Leu  Ala  Cys  Trp  Leu  Val  Arg  Gly  Leu
      50      55      60
Ala  Trp  Arg  Trp  Leu  Leu  Phe  Trp  Ala  Tyr  Ala  Phe  Gly  Gly  Cys  Val
65      70      75      80
Asn  His  Ser  Leu  Thr  Leu  Ala  Ile  His  Asp  Ile  Ser  His  Asn  Ala  Ala
      85      90      95
Phe  Gly  Thr  Gly  Arg  Ala  Ala  Arg  Asn  Arg  Trp  Leu  Ala  Val  Phe  Ala

```

```

          100          105          110
Asn Leu Pro Val Gly Val Pro Tyr Ala Ala Ser Phe Lys Lys Tyr His
          115          120          125
Val Asp His His Arg Tyr Leu Gly Gly Asp Gly Leu Asp Val Asp Val
          130          135          140
Pro Thr Arg
145

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<210> 3485

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3485

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60
tgcattgctta aaacatttaa ttttctatta tacagttaaa catttgcttg aattcagtga
120
gtctaaaaaaa tcttattgtt ctcagggttag cagtttagttg agcagagtcc attggtgaag
180
caatctagtt attggcaaatt tctaacacat ggtaagggtgt ggggggaaagg atttaaaata
240
acagaaaaaat gtaagtacaa acatacataa cagcaaaaata aaactcactt taacaaaaat
300
ttatttaaaa tggtaccccc atatttcctc aatgaccaac ttgttttcagt tttatctccc
360
cctcatccgg ttattttatg tctttttggg aggaaggagg atgagggttt ttgtttttta
420
acaaaatcac tggcttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt
480
ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt
540
atgagtccag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac
600
attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact
660
ccttgtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcatcacta
720
tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa
780
ggaacacgca tgtccttaaa ctcaaaggat cc
812

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<210> 3486

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3486

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Met Arg Val Pro Ser Ala Leu Val Thr Leu His Met Leu Leu Cys Ser
 1          5          10          15
Ile Pro Leu Ser Gly Arg Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn
          20          25          30
Asp Ile Ile Asp Ile Leu Leu Thr Phe Thr Gln Gly Val Asn Glu Lys

```

```
<210> 3487
<211> 772
<212> DNA
<213> Homo sapiens
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<210> 3488
<211> 59
<212> PRT
<213> Homo sapiens
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2653

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 35 40 45
 Phe Asn Pro Val Thr Glu Ile Ser Ile Cys Thr
 50 55

<210> 3489
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 3489
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 60
 agggagacca ggtctggccc ccaactctaa ggctcatctt agaggcgaga ttcaggccca
 120
 gccaggggtg ccccatgagg cctggtggtt ggaggcagag ggtatccctt gcccaaattc
 180
 gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
 240
 ctgtaatccc agcacttttg agagccccaa gacgacggat cacgagtc
 288

<210> 3490
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 3490
 Met Gly Ala His Leu Leu Pro Gly Pro Gly Arg Pro Gly Arg Pro Gly
 1 5 10 15
 Arg Pro Gly Leu Ala Pro Asn Ser Lys Ala His Leu Arg Gly Glu Ile
 20 25 30
 Gln Ala Gln Pro Arg Val Pro His Glu Ala Trp Trp Leu Glu Ala Glu
 35 40 45
 Gly Ile Pro Cys Pro Asn Ser Cys His Ile His Ser His Trp Glu Ser
 50 55 60
 Tyr Gly Asp Gly Pro Gly Ala Val Ala His Thr Cys Asn Pro Ser Thr
 65 70 75 80
 Leu Glu Ser Pro Lys Thr Thr Asp His Glu
 85 90

<210> 3491
 <211> 568
 <212> DNA
 <213> Homo sapiens

<400> 3491
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 60
 gacaaggaca gcatctgctt ttgggactgg gagaaagggg agaagctgga ttatttccac
 120
 aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc
 180

tcgcttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttgctgat
 240
 ttggaaaaga acccagagat ggtgaccgcg tggcaggggc tctcggacat gctgccaacg
 300
 acgcgaggag ctgggatggt ggtggactgg gagcaggaga ccggcctcct catgagctca
 360
 ggagacgtgc ggatcgctcg gatctgggac acagaccgtg agatgaaggt gcaggacatc
 420
 cctacgggcg cagacagctg tgtgacgagt ctgtcctgtg attcccaccg ctcaatcatc
 480
 gtggctggcc tcggtgacgg ctccatccgc gtctacgaca gaaggatggc actcagcgaa
 540
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 568

<210> 3492

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3492

Gly	Asn	Arg	Arg	Pro	Ser	Val	Val	Lys	Phe	His	Pro	Phe	Thr	Pro	Cys
1				5					10					15	
Ile	Ala	Val	Ala	Asp	Lys	Asp	Ser	Ile	Cys	Phe	Trp	Asp	Trp	Glu	Lys
			20					25					30		
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
		35					40					45			
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
	50					55					60				
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70					75				80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85						90					95	
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
		100						105					110		
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
	115						120					125			
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
	130					135					140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150					155				160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
			165					170						175	
Ala	Leu	Ser	Glu	Cys	Arg	Val	Met	Thr	Tyr	Arg	Glu	His			
			180					185							

<210> 3493

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 3493

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120
aatcactctg aaagatcaga caatagatca gaagcttctg agcgttctga ccatgaggac
180
aatgacccct cagatgtaga tcagcacagt ggatcagaag cccctaata tgaatgaagac
240
gaaggtcata gatcggatgg agggagccat cattcagaag cagaagggtc tgaaaaagca
300
cattcagatg atgaaaaatg gggcagagaa gataaaagt accagtcaga tgatgaaaag
360
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420
tctgacgatg atgagaaaat gcagaacaca gatgatgagg agaggcctca gctttccgat
480
gatgagagac aacagctatc tgaggaggaa aaggctaatt ctgatgatga acggccggta
540
gcttctgata atgatgatga gaaacagaat tctgatgatg aagaacaacc acagctgtct
600
gatgaagaga aaatgcaaaa ttctgatgat gaaaggccac aggccccaga tgaagaacac
660
aggcattcag atgatgaaga ggaacaggat cataaatcag aatccgcaag aggcagtgat
720
agtgaagatg aagttttacg aatgaaacgc aagaatgcga ttgcatctga ttcagaagcg
780
gatagtgaca ctgaggtgcc aaaagataat agtggaacca tggatttatt tggaggtgca
840
gatgatatct cttcagggag tgatggagaa gacaaaccac ctactccagg acagcctggt
900
gatgaaaatg gattgcctca ggatcaacag gaagaggagc caattcctga gaccagaata
960
gaagtagaaa tacccaaagt aaacactgat ttaggaaacg acttatattt tgttaaactg
1020
cccaactttc tcagtgtaga gccagacct tttgatctc agtattatga agatgaattt
1080
gaagatgaag aaatgctgga tgaagaagg agaaccagg taaaattaaa ggtagaaaat
1140
actataagat ggaggatacg ccgagatgaa gaaggaaatg aaattaaaga aagcaatgct
1200
cggatagtca agtggtcaga tggaaagcatg tccctgcatt taggcaatga agtgtttgat
1260
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1320
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agaatcttgc caatggctgg tcgtgatect gaatgccaac gcacagaaat gattaagaaa
1500
gaagaagaac gtttgagggc ttccatacgt agggaaatctc agcagcgccg aatgagagag
1560
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1620
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1680

cgagaggaac gagccagaat ctattcatca gacagtgatg agggatcaga agaagataaa
 1740
 gctcaaagat tactcaaagc aaagaaactt accagtgatg aggaaggatga accttccgga
 1800
 aagagaaaag cagaagatga tgataaagca aataaaaagc ataagaagta tgtgatcagc
 1860
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 1920
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 1980
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 2040
 cttttccggc caggcgcggt ggctcatgcc tgtaatccca gcacttcggg aggccgaggc
 2100
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 2220
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 2244

<210> 3494

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3494

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Gln	Pro	Ser	Asn	Lys	Glu	Leu	Phe	Gly	Asp	Asp	Ser	Glu	Asp	Glu	Gly
			20					25					30		
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
		35					40					45			
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser
		50					55				60				
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp
65					70					75				80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	Ser	Glu	Ala	Glu	Gly	
				85					90					95	
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys
			100					105					110		
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu
			115				120					125			
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
							135				140				
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
145					150					155					160
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp
				165					170					175	
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp
			180				185						190		
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser
		195					200					205			
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp

210		215		220
Asp Glu Glu Glu Gln	Asp His Lys Ser Glu	Ser Ala Arg Gly Ser Asp		
225	230	235	240	
Ser Glu Asp Glu Val	Leu Arg Met Lys Arg	Lys Asn Ala Ile Ala Ser		
	245	250	255	
Asp Ser Glu Ala Asp	Ser Asp Thr Glu Val	Pro Lys Asp Asn Ser Gly		
	260	265	270	
Thr Met Asp Leu Phe	Gly Gly Ala Asp Asp	Ile Ser Ser Gly Ser Asp		
	275	280	285	
Gly Glu Asp Lys Pro	Pro Thr Pro Gly Gln	Pro Val Asp Glu Asn Gly		
	290	295	300	
Leu Pro Gln Asp Gln	Gln Glu Glu Glu Pro	Ile Pro Glu Thr Arg Ile		
305	310	315	320	
Glu Val Glu Ile Pro	Lys Val Asn Thr Asp	Leu Gly Asn Asp Leu Tyr		
	325	330	335	
Phe Val Lys Leu Pro	Asn Phe Leu Ser Val	Glu Pro Arg Pro Phe Asp		
	340	345	350	
Pro Gln Tyr Tyr Glu	Asp Glu Phe Glu Asp	Glu Glu Met Leu Asp Glu		
	355	360	365	
Glu Gly Arg Thr Arg	Leu Lys Leu Lys Val	Glu Asn Thr Ile Arg Trp		
	370	375	380	
Arg Ile Arg Arg Asp	Glu Glu Gly Asn Glu	Ile Lys Glu Ser Asn Ala		
385	390	395	400	
Arg Ile Val Lys Trp	Ser Asp Gly Ser Met	Ser Leu His Leu Gly Asn		
	405	410	415	
Glu Val Phe Asp Val	Tyr Lys Ala Pro Leu	Gln Gly Asp His Asn His		
	420	425	430	
Leu Phe Ile Arg Gln	Gly Thr Gly Leu Gln	Gly Gln Ala Val Phe Lys		
	435	440	445	
Ala Lys Leu Thr Phe	Arg Pro His Ser Thr	Asp Ser Ala Thr His Arg		
	450	455	460	
Lys Met Thr Leu Ser	Leu Ala Asp Arg Cys	Ser Lys Thr Gln Lys Ile		
465	470	475	480	
Arg Ile Leu Pro Met	Ala Gly Arg Asp Pro	Glu Cys Gln Arg Thr Glu		
	485	490	495	
Met Ile Lys Lys Glu	Glu Glu Arg Leu Arg	Ala Ser Ile Arg Arg Glu		
	500	505	510	
Ser Gln Gln Arg Arg	Met Arg Glu Lys Gln	His Gln Arg Gly Leu Ser		
	515	520	525	
Ala Ser Tyr Leu Glu	Pro Asp Arg Tyr Asp	Glu Glu Glu Gly Glu		
	530	535	540	
Glu Ser Ile Ser Leu	Ala Ala Ile Lys Asn	Arg Tyr Lys Gly Gly Ile		
545	550	555	560	
Arg Glu Glu Arg Ala	Arg Ile Tyr Ser Ser	Asp Ser Asp Glu Gly Ser		
	565	570	575	
Glu Glu Asp Lys Ala	Gln Arg Leu Leu Lys	Ala Lys Lys Leu Thr Ser		
	580	585	590	
Asp Glu Glu Gly Glu	Pro Ser Gly Lys Arg	Lys Ala Glu Asp Asp Asp		
	595	600	605	
Lys Ala Asn Lys Lys	His Lys Lys Tyr Val	Ile Ser Asp Glu Glu Glu		
	610	615	620	
Glu Asp Asp Asp				
625				

<210> 3495
 <211> 1085
 <212> DNA
 <213> Homo sapiens

<400> 3495
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 120
 gcgtccccgg aggagatcaa gaaggcctat cggaagctgg cgctcaagta ccacccggac
 180
 aagaacccgg atgagggcgga gaagtttaaa ctcatatccc aggcataatga agtgctttca
 240
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc
 300
 tcaggcagcc ccagcttctc ttcacccatg gacatctttg acatgttctt tgggtggtggt
 360
 ggacggatgg ctagagagag aagaggcaag aatgttgtag accagttatc tgtaactctt
 420
 gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag
 480
 aaatgtgaag gtgttggtgg gaagaagggga tcggtggaga agtgcccgtc gtgcaagggg
 540
 cgggggatgc agatccacat ccagcagatc gggccgggca tggtagagca gatccagacc
 600
 gtgtgcatcg agtgcaaggg ccagggtgag cgcatcaacc ccaaggaccg ctgagagagc
 660
 tgcagcgggg ccaaggtgat ccgtgagaag aagattatcg aggtacatgt tgaaaaaggt
 720
 atgaaagatg ggcaaaagat actatttcat ggagaaggag atcaggagcc tgagctggag
 780
 cctggtgatg tcataattgt gcttgatcag aaggatcata gtgtctttca gagacgaggg
 840
 catgacttga tcatgaaaat gaaaattcag ctttctgaag ctctttgtgg cttcaagaag
 900
 acgataaaaa cattggacaa tcgaattctt gttattacat ccaaagcagg tgaggtgata
 960
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctcg
 1020
 gaaaaagggga ttctgatcat acagttttta gtaatctttc ctganaaaca ctggctttct
 1080
 ctgga
 1085

<210> 3496
 <211> 337
 <212> PRT
 <213> Homo sapiens

<400> 3496
 Met Val Lys Glu Thr Gln Tyr Tyr Asp Ile Leu Gly Val Lys Pro Ser
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Ser	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro	Lys	Lys	Arg	Asp	Val	Tyr		
	50					55					60						
Asp	Gln	Gly	Gly	Glu	Gln	Ala	Ile	Lys	Glu	Gly	Gly	Ser	Gly	Ser	Pro		
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Ser	Phe	Ser	Ser	Pro	Met	Asp	Ile	Phe	Asp	Met	Phe	Phe	Gly	Gly	Gly		
				85					90					95			
Gly	Arg	Met	Ala	Arg	Glu	Arg	Arg	Gly	Lys	Asn	Val	Val	His	Gln	Leu		
		100						105					110				
Ser	Val	Thr	Leu	Glu	Asp	Leu	Tyr	Asn	Gly	Val	Thr	Lys	Lys	Leu	Ala		
	115						120					125					
Leu	Gln	Lys	Asn	Val	Ile	Cys	Glu	Lys	Cys	Glu	Gly	Val	Gly	Gly	Lys		
	130					135				140							
Lys	Gly	Ser	Val	Glu	Lys	Cys	Pro	Leu	Cys	Lys	Gly	Arg	Gly	Met	Gln		
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Ile	His	Ile	Gln	Gln	Ile	Gly	Pro	Gly	Met	Val	Gln	Gln	Ile	Gln	Thr		
			165					170					175				
Val	Cys	Ile	Glu	Cys	Lys	Gly	Gln	Gly	Glu	Arg	Ile	Asn	Pro	Lys	Asp		
	180						185					190					
Arg	Cys	Glu	Ser	Cys	Ser	Gly	Ala	Lys	Val	Ile	Arg	Glu	Lys	Lys	Ile		
	195					200					205						
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	210					215					220						
Phe	His	Gly	Glu	Gly	Asp	Gln	Glu	Pro	Glu	Leu	Glu	Pro	Gly	Asp	Val		
225					230				235					240			
Ile	Ile	Val	Leu	Asp	Gln	Lys	Asp	His	Ser	Val	Phe	Gln	Arg	Arg	Gly		
			245					250					255				
His	Asp	Leu	Ile	Met	Lys	Met	Lys	Ile	Gln	Leu	Ser	Glu	Ala	Leu	Cys		
		260					265					270					
Gly	Phe	Lys	Lys	Thr	Ile	Lys	Thr	Leu	Asp	Asn	Arg	Ile	Leu	Val	Ile		
	275					280					285						
Thr	Ser	Lys	Ala	Gly	Glu	Val	Ile	Lys	His	Gly	Asp	Leu	Arg	Cys	Val		
	290					295				300							
Arg	Asp	Glu	Gly	Met	Pro	Ile	Tyr	Lys	Ala	Pro	Leu	Glu	Lys	Gly	Ile		
305					310				315					320			
Leu	Ile	Ile	Gln	Phe	Leu	Val	Ile	Phe	Pro	Xaa	Lys	His	Trp	Leu	Ser		
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Leu

<210> 3497

<211> 1638

<212> DNA

<213> Homo sapiens

<400> 3497

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gtggcaactt tgttgctata attttatgca gcagataaag gtagacgttc ctccccaaag
120

tttttagtat atccttctaa aaagttttcc tgagaat ttt tagtttggcc tctcaagttt
180

ccttatttta ccttttctta aattacctcc ctcccttcctt agtgaaatga gccttccttc
240
agcatacgca acttatccctt attgctttttt tcatacccaa ttttttgttt tatctctttc
300
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420
tggtgctgtt gttgcagctg ctccctgcctc actgtgagga atgaagaaag aggggaaaat
480
gcgggaagac ccacacacac tacaaaaatg gagagtatcc aggtcctaga ggaatgccaa
540
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600
ccagcaggaa gaaacctttt cagagagttc ctccgaacag aatacagtga agagaacctt
660
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720
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1638

<210> 3498

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3498

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 35 40 45
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
 50 55 60
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
 65 70 75 80
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
 85 90 95
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
 100 105 110
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
 115 120 125
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
 130 135 140
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
 145 150 155 160
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
 165 170 175
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
 180 185 190
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
 195 200 205
 Glu Ser
 210

<210> 3499

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3499

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 180
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 240
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 300
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 420
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 480
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 540

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 600
 gcatctcccg ccggccaagc ctccctcccg ccanggtccg gggcgatgca cagactcggg
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<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

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Gly	Ala	Arg	Arg	Ser	Pro	Gly	Thr	Trp	Arg	Tyr	Arg	Gly	His	Ser	Ser
			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
			35				40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
	50					55					60				
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65					70					75					80
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
				85				90						95	
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
			115				120					125			
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
			130			135				140					
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
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Lys	Arg	Arg	Val	Gly	Gly	Gly	Thr								
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<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

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 180
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 240
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 300

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 360
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<210> 3502
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 3502
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 Glu Ile Lys Leu Tyr Ala Gln Ile Pro Pro Ile Glu Lys Met Asp Ala
 35 40 45
 Ser Leu Ser Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn
 50 55 60
 Cys Ile Glu Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile
 65 70 75 80
 Leu Ser Leu Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala
 85 90 95
 Val Gly Asp Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu
 100 105 110
 Lys Leu Lys Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met
 115 120 125
 Ser Asn Asn Leu Val Lys Asp Trp Ala Glu Phe Val Lys Leu Ala Glu
 130 135 140
 Leu Pro Cys Leu Glu Asp Leu Val Phe Val Gly Asn Pro Leu Glu Glu
 145 150 155 160
 Lys His Ser Ala Glu Asn Asn Trp Ile Glu Glu Ala Thr Lys Arg Val
 165 170 175
 Pro Lys Leu Lys Lys Leu Asp Gly Thr Pro Val Ile Lys Gly Asp Glu
 180 185 190
 Glu Glu Asp Asn
 195

<210> 3503
 <211> 857
 <212> DNA
 <213> Homo sapiens

<400> 3503

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 120
 aatgcccaga gattagcgga gaagctccga gcccagaaac gggaacaaga cacaaagaag
 180
 gagccggtgt ccacaaacgc tgttcagcgg agagtgaag aaatagtgcg gttcacacgg
 240
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 300
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 420
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<210> 3504

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3504

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			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
			50			55					60				
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
65					70				75					80	
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
			100					105					110		
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
		115					120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130		135		140	
Leu His Leu Cys His Arg	Leu Asp Lys Glu Thr	Thr Gly Val Met Val			
145		150		155	160
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val	Gln Glu Leu Phe Arg				
	165		170		175
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro					
	180		185		190
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly					
	195		200		205
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg					
	210		215		220
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln					
225		230		235	240
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala					
	245		250		255
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val					
	260		265		270
His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp					
	275		280		285

<210> 3505

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 3505

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540
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600
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720
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840

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<210> 3506

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3506

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			20					25								
Met	Leu	Leu	Ala	Trp	Pro	Leu	Ala	Leu	Val	Ala	Ser	Leu	Gly	Ser	Ala	45
			35				40									
Glu	Lys	Glu	Pro	Glu	Gln	Pro	Pro	Ala	Leu	Trp	Arg	Lys	Val	Val	Asp	60
			50			55										
Phe	Leu	Leu	Lys	Ala	Ile	Met	Arg	Thr	Met	Trp	Phe	Ala	Gly	Gly	Phe	80
65					70					75						
His	Arg	Val	Ala	Val	Lys	Gly	Arg	Gln	Ala	Leu	Pro	Thr	Glu	Ala	Ala	95
				85					90							
Ile	Leu	Thr	Leu	Ala	Pro	His	Ser	Ser	Tyr	Phe	Asp	Ala	Ile	Pro	Val	110
			100					105								
Thr	Met	Thr	Met	Ser	Ser	Ile	Val	Met	Lys	Thr	Glu	Ser	Arg	Asp	Ile	125
			115					120								
Pro	Ile	Trp	Gly	Thr	Leu	Ile	Gln	Tyr	Ile	Arg	Pro	Val	Phe	Val	Ser	140
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Arg	Ser	Asp	Gln	Asp	Ser	Arg	Arg	Lys	Thr	Val	Glu	Glu	Ile	Lys	Arg	160
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Arg	Ala	Gln	Ser	Asn	Gly	Lys	Trp	Pro	Gln	Ile	Met	Ile	Phe	Pro	Glu	

				165					170					175			
Gly	Thr	Cys	Thr	Asn	Arg	Thr	Cys	Leu	Ile	Thr	Phe	Lys	Pro	Gly	Ala		
			180					185					190				
Phe	Ile	Pro	Gly	Ala	Pro	Val	His	Pro	Gly	Val	Leu	Arg	Tyr	Pro	Asn		
		195					200					205					
Lys	Leu	Asp	Thr	Ile	Thr	Trp	Thr	Trp	Gln	Gly	Pro	Gly	Ala	Leu	Glu		
	210					215					220						
Ile	Leu	Trp	Leu	Thr	Leu	Cys	Gln	Phe	His	Asn	Gln	Val	Glu	Ile	Glu		
225					230					235					240		
Phe	Leu	Pro	Val	Tyr	Ser	Pro	Ser	Glu	Glu	Glu	Lys	Arg	Asn	Pro	Ala		
			245					250						255			
Leu	Tyr	Ala	Ser	Asn	Val	Arg	Arg	Val	Met	Ala	Glu	Ala	Leu	Gly	Val		
		260						265					270				
Ser	Val	Thr	Asp	Tyr	Thr	Phe	Glu	Asp	Cys	Gln	Leu	Ala	Leu	Ala	Glu		
		275					280					285					
Gly	Gln	Leu	Arg	Leu	Pro	Ala	Asp	Thr	Cys	Leu	Leu	Glu	Phe	Ala	Arg		
	290					295				300							
Leu	Val	Arg	Gly	Leu	Gly	Leu	Lys	Pro	Glu	Lys	Leu	Glu	Lys	Asp	Leu		
305					310					315					320		
Asp	Arg	Tyr	Ser	Glu	Arg	Ala	Arg	Met	Lys	Gly	Gly	Glu	Lys	Ile	Gly		
			325					330						335			
Ile	Ala	Glu	Phe	Ala	Ala	Ser	Leu	Glu	Val	Pro	Val	Ser	Asp	Leu	Leu		
		340						345					350				
Glu	Asp	Met	Phe	Ser	Leu	Phe	Asp	Glu	Ser	Gly	Ser	Gly	Glu	Val	Asp		
		355					360					365					
Leu	Arg	Glu	Cys	Val	Val	Ala	Leu	Ser	Val	Val	Cys	Trp	Pro	Ala	Arg		
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		420						425					430				
Gln	Glu	Glu	Lys	Gly	Lys	Ile	Thr	Phe	Ala	Asp	Phe	His	Arg	Phe	Ala		
	435						440					445					
Glu	Met	Tyr	Pro	Ala	Phe	Ala	Glu	Glu	Tyr	Leu	Tyr	Pro	Asp	Gln	Thr		
	450					455					460						
His	Phe	Glu	Ser	Cys	Ala	Glu	Thr	Ser	Pro	Ala	Pro	Ile	Pro	Asn	Gly		
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Phe	Cys	Ala	Asp	Phe	Ser	Pro	Glu	Asn	Ser	Asp	Ala	Gly	Arg	Lys	Pro		
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<210> 3507

<211> 885

<212> DNA

<213> Homo sapiens

<400> 3507

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<211> 199

<212> PRT

<213> Homo sapiens

<400> 3508

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Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
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Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

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 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro
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 Arg Gln Leu Gly Lys Ala Pro Met Gly Gly Val Pro Trp Gly Ser Asp
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<210> 3511
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 <212> DNA
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3319

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<211> 462

<212> PRT

<213> Homo sapiens

<400> 3512

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 65           70           75           80
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 85           90           95
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 100          105          110
Phe Glu Phe Glu Leu Asn Gln Pro Ala Thr Ser Tyr Leu Lys Ala Thr
 115          120          125
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 130          135          140
Gln Tyr Val Ser Phe Lys Val Asp Ser Ser Lys Glu Ser Ala Glu Ala
 145          150          155          160
Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu Lys Thr Leu
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 195          200          205
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 210          215          220
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 245          250          255
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Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His Ser Pro Lys
 305          310          315          320
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Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met Glu Glu Val Leu Ile		415
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<211> 2103

<212> DNA

<213> Homo sapiens

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Lys	Pro	Tyr	Thr	Cys	Ser	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Asp	Arg	Ser
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<213> Homo sapiens

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<211> 547

<212> PRT

<213> Homo sapiens

<400> 3516

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 Glu Val Met Lys Ser Leu Ser Val Ser Ser Asp Phe Leu Gly Lys Asp
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<210> 3517

<211> 342

<212> DNA

<213> Homo sapiens

<400> 3517

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 <211> 99
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 <213> Homo sapiens

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 Gln Arg Met Pro Asp Arg Pro Thr Ser Arg Pro Leu Leu Val Arg Ala
 50 55 60
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 <213> Homo sapiens

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<211> 303

<212> PRT

<213> Homo sapiens

<400> 3520

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Arg Glu Glu Leu Ala Arg Ile Gly Leu Val Pro Pro Pro Glu Glu Phe
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Ala Asn Gly Val Leu Leu Ala Thr Pro Leu Ala Gly Pro Gly Pro Ser
65          70          75          80
Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro
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Pro Pro Ala Pro Glu Ser Ala Ala Asp Ser Gly Val Glu Glu Ala Asp
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Asp Thr His Thr Ser Phe Ala Asp Gly His Thr Phe Leu Leu Glu Lys
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Pro Val Thr Phe Arg Asp Pro Leu Leu Lys Gln Ser Ser Asp Ser Glu
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Lys Asp Thr Arg Ser Leu Gly Glu Glu Pro Val Gly Gly Leu Gly Ser
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<211> 638

<212> DNA

<213> Homo sapiens

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<210> 3522

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

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<211> 2614

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<211> 1116

<212> DNA

<213> Homo sapiens

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<211> 304

<212> PRT

<213> Homo sapiens

<400> 3526

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<211> 2838

<212> DNA

<213> Homo sapiens

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<211> 281

<212> PRT

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<212> DNA

<213> Homo sapiens

<400> 3529

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<210> 3530

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3530

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Thr	Thr	Ala	Trp	Arg	Pro	Ala	Thr	Leu	Pro	Pro	Arg	Ser	Pro	Ser	His
		20						25					30		
Cys	Xaa	Ser	Pro	Val	Ala	Gly	Val	Ala	His	Arg	Phe	His	Ser	Thr	Cys
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Gly	Lys	Asn	Val	Thr	Leu	Glu	Glu	Asp	Gly	Thr	Arg	Ala	Val	Arg	Ala
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65					70				75					80	
Glu	Glu	Val	Phe	Glu	Val	Lys	Val	Glu	Glu	Leu	Asp	Glu	Lys	Trp	Ala
			85					90						95	
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Pro	Gly	Ala	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Pro	Pro	Ser	Leu	Pro	Glu
		115					120					125			
Leu	Arg	Thr	Lys	Thr	Thr	Trp	Met	Val	Ser	Ser	Cys	Glu	Val	Arg	Arg
	130					135					140				
Asp	Gly	Gln	Leu	Gln	Arg	Met	Asn	Tyr	Gly	Arg	Asn	Leu	Glu	Arg	Leu
145					150					155					160
Gly	Val	Lys	Trp	Leu	Ala	Pro	Gly	Thr	Gly	Glu	Gly	Leu	Gly	Val	Glu
			165					170						175	
Val	Ala	Gly	Arg	Gly	Gly	Leu	Asn	Ile	Val	Arg	Pro	Cys	Pro	Thr	Ser
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<210> 3531

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3531

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 120
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 180

gatggaacga gtgagaatga atctggattt tgggattcct tcaaattgggg ctttacagga
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300
tctgggtcatc tctacgaaag atttcttcgc ataatgatgc tatccgtgct gaagaatacc
360
aagactcctg tgaaattctg gttcttgaag aattacttgt cccccacatt taaggagttt
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480
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660
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720
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<210> 3532

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3532

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Tyr	Ser	His	Asp	Gly	Thr	Asp	Ser	Pro	Pro	Asp	Ala	Asp	Glu	Val	Val	20	25	30	
Ile	Val	Leu	Asn	Asn	Phe	Lys	Ser	Lys	Ile	Ile	Lys	Val	Lys	Val	Gln	35	40	45	
Lys	Lys	Ala	Asp	Met	Val	Asn	Glu	Asp	Leu	Leu	Ser	Asp	Gly	Thr	Ser	50	55	60	
Glu	Asn	Glu	Ser	Gly	Phe	Trp	Asp	Ser	Phe	Lys	Trp	Gly	Phe	Thr	Gly	65	70	75	80
Gln	Lys	Thr	Glu	Glu	Val	Lys	Gln	Asp	Lys	Asp	Asp	Ile	Ile	Asn	Ile	85	90	95	
Phe	Ser	Val	Ala	Ser	Gly	His	Leu	Tyr	Glu	Arg	Phe	Leu	Arg	Ile	Met	100	105	110	
Met	Leu	Ser	Val	Leu	Lys	Asn	Thr	Lys	Thr	Pro	Val	Lys	Phe	Trp	Phe	115	120	125	
Leu	Lys	Asn	Tyr	Leu	Ser	Pro	Thr	Phe	Lys	Glu	Phe	Ile	Pro	Tyr	Met	130	135	140	
Ala	Asn	Glu	Tyr	Asn	Phe	Gln	Tyr	Glu	Leu	Val	Gln	Tyr	Lys	Trp	Pro	145	150	155	160
Arg	Trp	Leu	His	Gln	Gln	Thr	Glu	Lys	Gln	Arg	Ile	Ile	Trp	Gly	Tyr	165	170	175	
Lys	Ile	Leu	Phe	Leu	Asp	Val	Leu	Phe	Pro	Leu	Val	Val	Asp	Lys	Phe				

										180					185					190					
Leu	Phe	Val	Asp	Ala	Asp	Gln	Ile	Val	Arg	Thr	Asp	Leu	Lys	Glu	Leu										
										195					200					205					
Arg	Asp	Phe	Asn	Leu	Asp	Gly	Ala	Pro	Tyr	Gly	Tyr	Thr	Pro	Phe	Cys										
										210					215					220					
Asp	Ser	Arg	Arg	Glu	Met	Asp	Gly	Tyr	Arg	Phe	Trp	Lys	Ser	Gly	Tyr										
										225					230					235					
Trp	Ala	Ser	His	Leu	Ala	Gly	Arg	Lys	Tyr	His	Ile	Arg	Tyr												
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<210> 3533
<211> 1151
<212> DNA
<213> Homo sapiens
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120					
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180					
cagtggacgc	accccaactc	catggataac	ttgcccagtg	ccgcttcccc	cctggagcag
240					
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300					
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360					
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420					
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480					
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540					
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720					
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780					
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840					
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<210> 3534
<211> 313
<212> PRT
<213> Homo sapiens

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20 25 30
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35 40 45
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys
50 55 60
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser
65 70 75 80
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg
85 90 95
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp
100 105 110
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile
115 120 125
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly
130 135 140
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys
145 150 155 160
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser
165 170 175
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Ser Phe Ser
180 185 190
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys
195 200 205
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser
210 215 220
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro
225 230 235 240
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser
245 250 255
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr
260 265 270
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr
275 280 285
Pro Gln Val Gln Tyr Gly Ala Pro Ala Ser Leu Ser Met Ile Gln Gly
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Gly Phe Pro Leu Gly Pro Gln Cys Arg
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<210> 3535
<211> 723
<212> DNA
<213> Homo sapiens

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<210> 3536
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 3536
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 Arg Val Ser Leu Leu Leu Tyr Ile Ile His Gln Glu Glu Ile
 35 40 45
 Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu
 50 55 60
 His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser
 65 70 75 80
 Gln Asn Glu Thr Glu Asp Ile Leu Ala Phe Thr Arg Gln Tyr Phe Asp
 85 90 95
 Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser
 100 105 110
 Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu
 115 120 125
 Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln
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 Gly Asn Leu Pro Ser Pro Asp Tyr Phe Thr Glu Tyr Ile Phe Ser Ser

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Leu Asn Arg

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155

160

<210> 3537

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3537

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180
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360
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540
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<210> 3538

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3538

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Ser Trp Thr Leu Cys Lys His Phe Cys Ala Cys Trp Val Gly Ala Arg
20           25           30
Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly
35           40           45
Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg
50           55           60
Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly
65           70           75           80
His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg
85           90           95
Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

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          100          105          110
Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro
          115          120          125
Cys Pro Ser Pro Ser Leu Glu Val Pro Cys Pro Ala Gly Pro Val Asn
          130          135          140
Met Gln Trp Glu Ser Gln Ala Val Gln Trp
145          150

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<210> 3539

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3539

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120
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180
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300
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360
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420
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480
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540
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600
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660
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720
cccgataatg agaccctcta ccgcagcggc ttgttgggct acgtcagtggt gtttggcatg
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818

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<210> 3540

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3540

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          20          25          30
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<210> 3542

<211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3542

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Arg	Met	Leu	Ser	Phe	Gln	Gly	Leu	Ala	Glu	Leu	Ala	His	Arg	Glu	Tyr
		20						25					30		
Gln	Ala	Gly	Asp	Phe	Glu	Ala	Ala	Glu	Arg	His	Cys	Met	Gln	Leu	Trp
		35					40					45			
Arg	Gln	Glu	Pro	Asp	Asn	Thr	Gly	Val	Leu	Leu	Leu	Leu	Ser	Ser	Ile
	50					55					60				
His	Phe	Gln	Cys	Arg	Arg	Leu	Asp	Arg	Ser	Ala	His	Phe	Ser	Thr	Leu
65					70					75					80
Ala	Ile	Lys	Gln	Asn	Pro	Leu	Leu	Ala	Glu	Ala	Tyr	Ser	Asn	Leu	Gly
			85						90					95	
Asn	Val	Tyr	Lys	Glu	Arg	Gly	Gln	Leu	Gln	Glu	Ala	Ile	Glu	His	Tyr
		100						105					110		
Arg	His	Ala	Leu	Arg	Leu	Lys	Pro	Asp	Phe	Ile	Asp	Gly	Tyr	Ile	Asn
		115				120						125			
Ala	Ala	Ala	Ala	Leu	Val	Ala	Ala	Gly	Asp	Met	Glu	Gly	Ala	Val	Gln
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Ala	Tyr	Val	Ser	Ala	Leu	Gln	Pro	Gly							
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<210> 3543
 <211> 1206
 <212> DNA
 <213> Homo sapiens

<400> 3543

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240
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420
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480
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540
atattctgtc tgggtgcctt agtgagggcc tccataactg atccaggaag actccctgag
600
aaccccaaga tcccatggtg agaaaggag ttctgggaat tatgtaacaa gtgtaatttg
660

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<211> 3657

<212> DNA

<213> Homo sapiens

<400> 3545

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<213> Homo sapiens

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Leu	Ala	Asp	Pro	Gly	Trp	Ala	Ser	Ile	Ser	Arg	Gly	Val	Leu	Val	Cys
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Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
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Leu	Leu	Asp	Pro	Ala	Gln	Val	Gln	Ser	Gly	Arg	Arg	Lys	Ala	Asn	Pro
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Tyr Glu Leu Thr Asp	Arg Leu Ala Phe Tyr Leu	Cys Gly Arg Lys Pro
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<213> Homo sapiens

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Leu	Arg	Glu	His	Leu	Val	Arg	Phe	Glu	Arg	Leu	Arg	Arg	Ala	Met	Glu
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Leu	Arg	Arg	Arg	Arg	Glu	Ile	Ala	Glu	Arg	Glu	Arg	Arg	Glu	Arg	Glu
			100					105					110		
Arg	Ile	Arg	Ile	Ile	Arg	Glu	Arg	Glu	Glu	Arg	Glu	Arg	Leu	Gln	Arg
	115					120						125			
Glu	Arg	Glu	Arg	Leu	Glu	Ile	Glu	Arg	Gln	Lys	Leu	Glu	Arg	Glu	Arg
	130					135					140				
Met	Glu	Arg	Glu	Arg	Leu	Glu	Arg	Glu	Arg	Ile	Arg	Ile	Glu	Gln	Glu
145					150					155					160
Arg	Arg	Lys	Glu	Ala	Glu	Arg	Ile	Ala	Arg	Glu	Arg	Glu	Glu	Leu	Arg
			165					170						175	
Arg	Gln	Gln	Gln	Gln	Leu	Arg	Tyr	Glu	Gln	Glu	Lys	Arg	Asn	Ser	Leu
			180					185					190		
Lys	Arg	Pro	Arg	Asp	Val	Asp	His	Arg	Arg	Asp	Asp	Pro	Tyr	Trp	Ser
	195					200						205			
Glu	Asn	Lys	Lys	Leu	Ser	Leu	Asp	Thr	Asp	Ala	Arg	Phe	Gly	His	Gly
	210					215					220				
Ser	Asp	Tyr	Ser	Arg	Gln	Gln	Asn	Arg	Phe	Asn	Asp	Phe	Asp	His	Arg
225					230				235					240	
Glu	Arg	Gly	Arg	Phe	Pro	Glu	Ser	Ser	Ala	Val	Gln	Ser	Ser	Ser	Phe
			245						250					255	
Glu	Arg	Arg	Asp	Arg	Phe	Val	Gly	Gln	Ser	Glu	Gly	Lys	Lys	Ala	Arg
			260					265					270		
Pro	Thr	Ala	Arg	Arg	Glu	Asp	Pro	Ser	Phe	Glu	Arg	Tyr	Pro	Lys	Asn
	275					280						285			
Phe	Ser	Asp	Ser	Arg	Arg	Asn	Glu	Pro	Pro	Pro	Pro	Arg	Asn	Glu	Leu
	290					295					300				
Arg	Glu	Ser	Asp	Arg	Arg	Glu	Val	Arg	Gly	Glu	Arg	Asp	Glu	Arg	Arg
305					310					315				320	
Thr	Val	Ile	Ile	His	Asp	Arg	Pro	Asp	Ile	Thr	His	Pro	Arg	His	Pro
			325						330					335	
Arg	Glu	Ala	Gly	Pro	Asn	Pro	Ser	Arg	Pro	Thr	Ser	Trp	Lys	Ser	Asp
			340					345					350		
Gly	Ser	Met	Ser	Thr	Asp	Lys	Arg	Glu	Thr	Arg	Val	Glu	Arg	Pro	Glu
	355					360						365			
Arg	Ser	Gly	Arg	Glu	Val	Ser	Gly	His	Ser	Val	Arg	Gly	Ala	Pro	Pro

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      370              375              380
Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg
385              390              395              400
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu
      405              410              415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys
      420              425              430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg
      435              440              445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser
      450              455              460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser
465              470              475              480
Met Pro Arg Gly Ser Gly Ser Gly Phe Lys Pro Phe Lys Gly Gly Pro
      485              490              495
Pro Arg Arg Phe
      500

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<210> 3551
<211> 545
<212> DNA
<213> Homo sapiens

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<400> 3551
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60
atttcttaag ataattgaga aagataaaact tctttttcag gaggggtccat cttcctgcca
120
tttcttgtga ctggctataa attccatgca gtgctggaat gtgcttctca cagttagagt
180
gctgagcacc tgttttattt cacactccct tgattcctgg ggtaaattccc atctccgcag
240
catgggctcc agttaaattc attagtgggc cagatgtgtg tcccctgtca gctggccaag
300
taaccccaact gtttatcgac aggttctcag gaatcagata gctcgcagtc ggccaagaag
360
gacatgctgg ctgccttgaa gtccaggcag gaagctctgg aggaaacct gcgtcagagg
420
ctggaggaac tgaagaagct gtgtctccga gaagctgtaa gcctttccta gctcatccccg
480
ttgaaattgg tgttgtctgt gatgtcactg atctttctga tgtcatttga tctttttgat
540
gtcat
545

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<210> 3552
<211> 55
<212> PRT
<213> Homo sapiens

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<400> 3552
Pro His Cys Leu Ser Thr Gly Ser Gln Glu Ser Asp Ser Ser Gln Ser
1      5      10      15
Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu

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	20		25		30										
Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu	Cys	Leu
	35		40		45										
Arg	Glu	Ala	Val	Ser	Leu	Ser									
	50		55												

<210> 3553
 <211> 1412
 <212> DNA
 <213> Homo sapiens

<400> 3553
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 120
 gatgaccagc tcaacatcct gcccatctcc tcccacgttg ccaccatgga ggccctgcct
 180
 cccagactc cggatgagag tcttggtcct tctgatctgg agctgaggga gttgaaggag
 240
 agcttgagg acaccagcc tgtgggtgtg ttgggtggact gctgtaagac tctagaccag
 300
 gccaaagctg tcttgaaatt tatcgagggc atctctgaaa agaccctgag gagtactgtt
 360
 gcactcacag ctgctcgagg acggggaaaa tctgcagccc tgggattggc gattgctggg
 420
 gcggtggcat ttgggtactc caatatcttt gttacctccc caagccctga taacctccat
 480
 actctgtttg aatttgtatt taaaggattt gatgctctgc aatatcagga acatctggat
 540
 tatgagatta tccagtctct aaatcctgaa ttaacaaaag cagtgatcat agtgaatgta
 600
 tttcgagaac acaggcagac tattcagtat atacatcctg cagatgctgt gaagctgggc
 660
 caggctgaac tagttgtgat tgatgaagct gccgccatcc cctccccctt ggtgaagagc
 720
 ctacttggcc cctaccttgt tttcatggca tccaccatca atggctatga gggcactggc
 780
 cggtcactgt ccctcaagct aattcagcag ctccgtcaac agagcgccca gagccaggtc
 840
 agcaccactg ctgagaataa gaccacgacg acagccagat tggcatcagc gcggacactg
 900
 catgaggttt ccctccagga gtcaatccga tacgcccctg gggatgcagt ggagaagtgg
 960
 ctgaatgact tgctgtgcct ggattgcctc aacatcactc ggatagtctc aggctgcccc
 1020
 ttgcctgaag cttgtgaact gtactatgtt aatagagata cctctttttg ctaccacaag
 1080
 gcctctgaag ttttccctcca acggcttatg gccctctacg tggcttctca ctacaagaac
 1140
 tctcccaatg atctccagat gctctccgat gcaccttctc accatctctt ctgccttctg
 1200
 cctcctgtgc cccccacca gaatgccctt ccaaaagtgc ttgctgttat ccagggtatag
 1260

gaacagagggc gtccttgtgg cagtgatttg ggggaaccact gaggcacag gaattagtgg
 1320
 cttaataact gcattgtggg agttttgaaa ctgtggagtc ctggtctgga accaaggggc
 1380
 tgggtctgct gagacaggtg actagggtgc ac
 1412

<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

Tyr	Thr	Val	Thr	Met	Asp	Val	His	Ser	Arg	Tyr	Arg	Thr	Glu	Ala	His
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Gln	Asp	Val	Val	Gly	Arg	Phe	Asn	Glu	Arg	Phe	Ile	Leu	Ser	Leu	Ala
		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
		35					40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	50					55					60				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
65					70					75					80
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
			85						90					95	
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
		100						105					110		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
		115					120					125			
Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
	130					135					140				
Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
145					150					155					160
Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
				165					170					175	
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
			180					185					190		
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
		195					200					205			
Gln	Tyr	Ile	His	Pro	Ala	Asp	Ala	Val	Lys	Leu	Gly	Gln	Ala	Glu	Leu
	210					215					220				
Val	Val	Ile	Asp	Glu	Ala	Ala	Ala	Ile	Pro	Leu	Pro	Leu	Val	Lys	Ser
225					230					235					240
Leu	Leu	Gly	Pro	Tyr	Leu	Val	Phe	Met	Ala	Ser	Thr	Ile	Asn	Gly	Tyr
				245					250					255	
Glu	Gly	Thr	Gly	Arg	Ser	Leu	Ser	Leu	Lys	Leu	Ile	Gln	Gln	Leu	Arg
			260					265					270		
Gln	Gln	Ser	Ala	Gln	Ser	Gln	Val	Ser	Thr	Thr	Ala	Glu	Asn	Lys	Thr
		275					280					285			
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290					295					300				
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
305					310					315					320
Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

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<400> 3555
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ctggtgggggt cggaccaggc cccgggcccgg gacaagaaca tccccgccgg gctgcagtcc
120
atgaaccagg cgttgcagag gcgcttcgcc aaggggggtgc agtacaacat gaagatagtg
180
atccgggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca gggccggccg
240
ttcgtggagg agtacatccc cacacaggag atccagggtca ccagcatcca ctggagctac
300
aagaccacgg atgacatcgt gaaggttgaa gtctgggatg tagtagacaa aggaaaatgc
360
aaaaagcgag gcgacggctt aaagatggag aacgaccccc aggaggcgga gtctgaaatg
420
gccctggatg ctgagttcct ggacgtgtac aagaactgca acggggtggt catgatgttc
480
gacattacca agcagtggac cttcaattac attctccggg agcttccaaa agtgcccacc
540
cacgtgccag tgtgcgtgct ggggaactac cgggacatgg gcgagcaccg agtcatcnnc
600
tgccggacgn acgtgcgtga cttcatcgac aacctggaca gacctccagg ttctctctac
660
ttccgctatg ctgagtcctc catgaagaac agcttcggcc taaagtacct tcataagttc
720
ttcaatatcc catttttgca gcttcagagg gagacgctgt tgcggcagct ggagacgaac
780
cagctggaca tggacgccac gctggaggag ctgtcgggtgc agcaggagac ggaggaccag
840
aactacggca tcttctctgga gatgatggag gctcgcagcc gtggccatgc gtccccactg
900
gcggccaacg ggcagagccc atccccgggc tcccagtcac cagtggtgcc tgcaggcgct
960
gtgtccacgg ggagctccag ccccggcaca gccagccccg ccccacagct gccctcaat
1020

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ggttgccccca ccatectc
1038

<210> 3556

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

Met	Phe	Ser	Ala	Leu	Lys	Lys	Leu	Val	Gly	Ser	Asp	Gln	Ala	Pro	Gly
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Arg	Asp	Lys	Asn	Ile	Pro	Ala	Gly	Leu	Gln	Ser	Met	Asn	Gln	Ala	Leu
			20					25					30		
Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile
			35				40					45			
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln
	50					55					60				
Gly	Arg	Pro	Phe	Val	Glu	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val
65					70					75				80	
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val
			85						90				95		
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp
			100					105					110		
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala
		115					120					125			
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val
	130					135					140				
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg
145				150						155				160	
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn
			165						170					175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val
		180					185						190		
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe
		195				200					205				
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu
	210					215					220				
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu
225				230						235				240	
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu
			245						250					255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe
			260					265					270		
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala
		275					280					285			
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro
	290					295					300				
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro
305					310					315				320	
Ala	Pro	Gln	Leu	Pro	Leu	Asn	Gly	Cys	Pro	Thr	Ile	Leu			
			325						330						

<210> 3557

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3557

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ccggcattga tcaagtccat ctgggctatg gccataagcc aacaccagtt ctatctggac
120
agaaagcaga gtaagtccaa aatccatgca gcacgcagcc tgagtgagat cgccatcgac
180
ctgaccgaga cggggacgct gaagacctcg aagctggcca acatgggtag caaggggaag
240
atcatcagcg gcagcagcgg cagcctgctg tcttcaggat ctggtgccag gagacactgc
300
attctactcc caggtttctca ggaatcagat agctcgcagt cggccaagaa ggacatgctg
360
gctgccttga agtccaggca ggaagctctg gaggaacccc tgcgtcagag gctggaggaa
420
ctgaagaagc tgtgtctccg agaagctgag ctcacgggca agctgccagt agaatatccc
480
ctggat
486

<210> 3558

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
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Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40				45				
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50					55					60				
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
65					70					75				80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85					90						95	
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115					120					125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130					135					140				
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
145					150					155					160
Leu	Asp														

<210> 3559

<211> 673

<212> DNA

<213> Homo sapiens

<400> 3559

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gaaggagcga gcgggggagc gaggcgttta cctggaggca gcggcttggg cgcgcagagc
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ggccgcggct cccccgcacc tgcggccatg gatgaggagc gcgccctcta catcgccgg
120
gccggcgaag caggggctat cgagcgggtc ctgagggatt acagcgacaa gcatagggct
180
actttcaa at ttgaatcaac agatgaagat aaaagaaaga aactctgtga aggcatattt
240
aaagtcctta taaaggacat cccaacaaca tgtcaagtgt cctgcctgga agtactccgc
300
attctctcca gagacaaaaa ggtttttagtt cctgtgacaa ctaaggaaaa tatgcagata
360
ctgctgcgac tagccaagct aaatgagtta gatgattctt tggagaaagt atcagagttc
420
ccagttattg tggagtcatt aaaatgtctg tgtaatatag tgttcaacag tcagatggca
480
cagcagctca gcctggaact taatcttgct gcaaagctct gtaacctcct gagaaagtgc
540
aaggaccgga aatttatcaa tgacattaag tgctttgact tgcgcttgct cttccttctg
600
tcacttttgc acaccgacat caggtcacaa ttgcgctatg agctccaggg actaccgctg
660
ctaacgcaga tcg
673

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<210> 3560

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3560

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Met Asp Glu Glu Arg Ala Leu Tyr Ile Val Arg Ala Gly Glu Ala Gly
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Ala Ile Glu Arg Val Leu Arg Asp Tyr Ser Asp Lys His Arg Ala Thr
20     25     30
Phe Lys Phe Glu Ser Thr Asp Glu Asp Lys Arg Lys Lys Leu Cys Glu
35     40     45
Gly Ile Phe Lys Val Leu Ile Lys Asp Ile Pro Thr Thr Cys Gln Val
50     55     60
Ser Cys Leu Glu Val Leu Arg Ile Leu Ser Arg Asp Lys Lys Val Leu
65     70     75     80
Val Pro Val Thr Thr Lys Glu Asn Met Gln Ile Leu Leu Arg Leu Ala
85     90     95
Lys Leu Asn Glu Leu Asp Asp Ser Leu Glu Lys Val Ser Glu Phe Pro
100    105    110
Val Ile Val Glu Ser Leu Lys Cys Leu Cys Asn Ile Val Phe Asn Ser
115    120    125
Gln Met Ala Gln Gln Leu Ser Leu Glu Leu Asn Leu Ala Ala Lys Leu
130    135    140
Cys Asn Leu Leu Arg Lys Cys Lys Asp Arg Lys Phe Ile Asn Asp Ile

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145		150		155		160									
Lys	Cys	Phe	Asp	Leu	Arg	Leu	Leu	Phe	Leu	Leu	Ser	Leu	Leu	His	Thr
				165				170						175	
Asp	Ile	Arg	Ser	Gln	Leu	Arg	Tyr	Glu	Leu	Gln	Gly	Leu	Pro	Leu	Leu
			180					185					190		
Thr	Gln	Ile													
		195													

<210> 3561
 <211> 523
 <212> DNA
 <213> Homo sapiens

<400> 3561
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 120
 ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga
 180
 gaagctccta cctgcccccg atcatgcacg tggccactga ggatgccaga cgaggtgatg
 240
 ctggtctcat agagaatgta cccgaaggac tgtccatttc cccattgac tggcaggttc
 300
 tccatgttga tgggcttttc agacttgatt ggctgcgtac agaagagatg gaggggtggg
 360
 caggctcagg aggagtgggg tcacagacag actctgcttg ggggctggca catgggggtgg
 420
 aagcggaggt ttggtgggtg ttttctactt tgactttctca ttgcactaaa catacaactc
 480
 tccaggggtga cggggaagag gagtggggca aaggggtgtg cac
 523

<210> 3562
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 3562
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Glu Asn Val Pro Glu Gly Leu Ser Ile Ser Pro Ile Asp Trp Gln Val
20 25 30
Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu
35 40 45
Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser
50 55 60
Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe
65 70 75 80
Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp
85 90 95
Gly Glu Glu Glu Trp Gly Lys Gly Val Cys
100 105

<210> 3563
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 3563
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 60
 cgaagccagg ggcgcgcggc gatgtgagcc atgagcgcga cgtggacgct gtcgccggag
 120
 cccctgccgc cgtcgacggg gccccagtg ggcgcgggccc tggacgcgga gcagcgcacg
 180
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<211> 869

<212> PRT

<213> Homo sapiens

<400> 3568

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<210> 3570
 <211> 893
 <212> PRT
 <213> Homo sapiens

<400> 3570

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			20					25					30		
Arg	Ala	Pro	Ser	Pro	Pro	Trp	Pro	Pro	Gln	Gly	Pro	Leu	Ser	Pro	Gly
		35				40						45			
Pro	Gly	Ser	Leu	Pro	Leu	Ser	Ile	Ala	Arg	Val	Gln	Thr	Pro	Pro	Trp
	50					55					60				
His	Pro	Pro	Gly	Ala	Pro	Ser	Pro	Gly	Leu	Leu	Gln	Asp	Ser	Asp	Ser
65					70					75				80	
Leu	Ser	Gly	Ser	Tyr	Leu	Asp	Pro	Asn	Tyr	Gln	Ser	Ile	Lys	Trp	Gln
			85					90					95		
Pro	His	Gln	Gln	Asn	Lys	Trp	Ala	Thr	Leu	Tyr	Asp	Ala	Asn	Tyr	Lys
		100						105					110		
Glu	Leu	Pro	Met	Leu	Thr	Tyr	Arg	Val	Asp	Ala	Asp	Lys	Gly	Phe	Asn
	115						120					125			
Phe	Ser	Val	Gly	Asp	Asp	Ala	Phe	Val	Cys	Gln	Lys	Lys	Asn	His	Phe
	130					135					140				
Gln	Val	Thr	Val	Tyr	Ile	Gly	Met	Leu	Gly	Glu	Pro	Lys	Tyr	Val	Lys
145					150					155				160	
Thr	Pro	Glu	Gly	Leu	Lys	Pro	Leu	Asp	Cys	Phe	Tyr	Leu	Lys	Leu	His
			165					170					175		
Gly	Val	Lys	Leu	Glu	Ala	Leu	Asn	Gln	Ser	Ile	Asn	Ile	Glu	Gln	Ser
		180					185					190			
Gln	Ser	Asp	Arg	Ser	Lys	Arg	Pro	Phe	Asn	Pro	Val	Thr	Val	Asn	Leu
	195					200					205				
Pro	Pro	Glu	Gln	Val	Thr	Lys	Val	Thr	Val	Gly	Arg	Leu	His	Phe	Ser
	210				215					220					
Glu	Thr	Thr	Ala	Asn	Asn	Met	Arg	Lys	Lys	Gly	Lys	Pro	Asn	Pro	Asp
225					230					235				240	
Gln	Arg	Tyr	Phe	Met	Leu	Val	Val	Ala	Leu	Gln	Ala	His	Ala	Gln	Asn
			245					250						255	
Gln	Asn	Tyr	Thr	Leu	Ala	Ala	Gln	Ile	Ser	Glu	Arg	Ile	Ile	Val	Arg
		260					265					270			
Ala	Ser	Asn	Pro	Gly	Gln	Phe	Glu	Ser	Asp	Ser	Asp	Val	Leu	Trp	Gln
	275					280						285			
Arg	Ala	Gln	Val	Pro	Asp	Thr	Val	Phe	His	His	Gly	Arg	Val	Gly	Ile
	290				295						300				
Asn	Thr	Asp	Arg	Pro	Asp	Glu	Ala	Leu	Val	Val	His	Gly	Asn	Val	Lys
305					310					315				320	
Val	Met	Gly	Ser	Leu	Met	His	Pro	Ser	Asp	Leu	Arg	Ala	Lys	Glu	His
			325					330					335		
Val	Gln	Glu	Val	Asp	Thr	Thr	Glu	Gln	Leu	Lys	Arg	Ile	Ser	Arg	Met

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770	775	780
Asn Phe Thr Tyr His Ile Pro Val Ser Ser Gly Thr Pro Leu His Leu		
785	790	795
Ser Leu Thr Leu Gln Met Asn Ser Ser Ser Pro Val Ser Val Val Leu		800
	805	810
Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro		815
	820	825
Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp		830
	835	840
Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val		845
	850	855
Ala Leu Leu Gly Gln Ala Asn Cys Ser Ser Glu Ala Leu Ala Gln Pro		860
865	870	875
Ala Thr Asp Tyr His Phe His Phe Tyr Arg Leu Cys Asp		880
	885	890

<210> 3571
 <211> 528
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 300
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 360
 ctgggcgcag gatacccaac cgtgctttcg cagagctggt acaacagtgt gatgcaatgc
 420
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 528

<210> 3572
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3572
 Thr Arg Pro Leu Ser Gly Leu Val Trp Val Ala Leu Leu Ala Leu Gly
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 His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val
 20 25 30
 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
 35 40 45
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His

50		55		60												
Leu	Leu	Val	Leu	Gly	Leu	Tyr	Leu	Gly	Pro	Gln	Pro	Asp	Ser	Arg	Pro	
65					70					75					80	
Ala	Leu	Leu	Pro	Gln	Val	Ser	Thr	Gln	Val	Ala	Gln	Ala	Ala	Leu	Arg	
				85					90					95		
Thr	Ala	Leu	Pro	Arg	Ala	Ser	Arg	Leu	Leu	Leu	Gly	Gly	Cys			
			100					105						110		

<210> 3573

<211> 1236

<212> DNA

<213> Homo sapiens

<400> 3573

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120
ccctgcctgc tccccaaagc ccagccttca gcccccccaa tcaatcccag ccacacacac
180
agtcccattht tttccatcca ttctggtact tgtgtgttca ataaacctgg tggacacaca
240
gcttcacata cccacacact cacagccaca aaccccagaa gtcatgcaca tgccgacgca
300
ccttgtggca catgcacaca caaccacact tgtgtgcaaa gtggcagaca cccccacaca
360
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480
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540
ttcccttttg atgtggaaag ggggcccccc agccccgccc tgcagcattht caccttcgcc
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720
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1020
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1080
ggccgggggtg ggagcagggc ctggctccgc cccggggggc gggacaaggg ggctgattcc
1140
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1200

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1236

<210> 3574
<211> 361
<212> PRT
<213> Homo sapiens

<400> 3574
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20 25 30
Ile Asn Pro Ser His Thr His Ser Pro Ile Phe Ser Ile His Ser Gly
35 40 45
Thr Cys Val Phe Asn Lys Pro Gly Gly His Thr Ala Ser His Thr His
50 55 60
Thr Leu Thr Ala Thr Asn Pro Arg Ser His Ala His Ala Asp Ala Pro
65 70 75 80
Cys Gly Thr Cys Thr His Asn His Thr Cys Val Gln Ser Gly Arg His
85 90 95
Thr His Thr Cys Ile Glu Ala Ser Leu Trp Thr Pro Ser Ala Ser His
100 105 110
Arg Gly Gly Ser Pro Ala Val Phe Asp Trp Phe Phe Glu Ala Ala Cys
115 120 125
Pro Ala Ser Val Gln Glu Asp Pro Pro Ile Leu Arg Gln Phe Pro Pro
130 135 140
Asp Phe Arg Asp Gln Glu Ala Met Gln Met Val Pro Lys Phe Cys Phe
145 150 155 160
Pro Phe Asp Val Glu Arg Gly Pro Pro Ser Pro Ala Val Gln His Phe
165 170 175
Thr Phe Ala Leu Thr Asp Leu Ala Gly Asn Arg Arg Phe Gly Phe Cys
180 185 190
Arg Leu Arg Ala Gly Thr Gln Ser Cys Leu Cys Ile Leu Ser His Leu
195 200 205
Pro Trp Phe Glu Val Phe Tyr Lys Leu Leu Asn Thr Val Gly Asp Leu
210 215 220
Leu Ala Gln Asp Gln Val Thr Glu Ala Glu Glu Leu Leu Gln Asn Leu
225 230 235 240
Phe Gln Gln Ser Leu Ser Gly Pro Gln Ala Ser Val Gly Leu Glu Leu
245 250 255
Gly Ser Gly Val Thr Val Ser Ser Gly Gln Gly Ile Pro Pro Pro Thr
260 265 270
Arg Gly Asn Ser Lys Pro Leu Ser Cys Phe Val Ala Pro Asp Ser Gly
275 280 285
Arg Leu Pro Ser Ile Pro Glu Asn Arg Asn Leu Thr Glu Leu Val Val
290 295 300
Ala Val Thr Asp Glu Asn Ile Val Gly Leu Phe Ala Ala Leu Leu Ala
305 310 315 320
Glu Arg Arg Val Leu Leu Thr Ala Ser Lys Leu Ser Thr Leu Arg Arg
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Arg Asp Lys Gly Ala Asp Ser Leu Leu

355

360

<210> 3575

<211> 769

<212> DNA

<213> Homo sapiens

<400> 3575

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180
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cactagaagg caccatgtaa cttgctggat ttggagtgtg acttcttctt ctgggagcag
300
gagaagtatg tggagtaatc ttgggggaat gaagagggga agaccagca gacaacgaca
360
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420
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480
caaagatgaa ggaaataatt ttatcttggt ttggtgtaga aaaagctctg attaaagcaa
540
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600
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660
atttaataaa ttaatggaag agtgggaagt aacagaattg tggctcttta taaaattatg
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769

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<210> 3576

<211> 205

<212> PRT

<213> Homo sapiens

<400> 3576

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20           25           30
Ser Thr Thr Lys Gln Asp Lys Ile Ile Ser Phe Ile Phe Ala Leu Thr
35           40           45
Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe
50           55           60
Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe
65           70           75           80
Thr Ser Ser Ser Gly Met Ser Leu Ser Ala Gly Ser Ser Pro Leu His
85           90           95
Ser Pro Lys Ile Thr Pro His Thr Ser Pro Ala Pro Arg Arg Arg Ser

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			100					105						110			
His	Thr	Pro	Asn	Pro	Ala	Ser	Tyr	Met	Val	Pro	Ser	Ser	Ala	Ser	Thr		
		115						120					125				
Ser	Val	Asn	Asn	Pro	Val	Ser	Gln	Thr	Pro	Ser	Ser	Gly	Gln	Val	Ile		
		130					135					140					
Gln	Lys	Glu	Thr	Val	Gly	Gly	Thr	Thr	Tyr	Phe	Tyr	Thr	Asp	Thr	Thr		
145					150					155					160		
Pro	Ala	Pro	Leu	Thr	Gly	Met	Val	Phe	Pro	Asn	Tyr	His	Ile	Tyr	Pro		
			165					170					175				
Pro	Thr	Ala	Pro	His	Val	Ala	Tyr	Met	Gln	Pro	Lys	Ala	Asn	Ala	Pro		
		180						185					190				
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		195						200				205					

<210> 3577

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3577

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120
gtgattgggg agagcatgta cggggacttt gaggaagctt ttgaccatct gcagaacaga
180
ctgatcgcca ccaagaaccc agaagaaatc agaggcgggg gacttctcaa gtacagcaac
240
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300
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360
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420
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480
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720
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780
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900
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960
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1020

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<210> 3578
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 3578
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 Ile Ser Glu His Phe His Pro Thr Val Ile Gly Glu Ser Met Tyr Gly
 35 40 45
 Asp Phe Glu Glu Ala Phe Asp His Leu Gln Asn Arg Leu Ile Ala Thr
 50 55 60
 Lys Asn Pro Glu Glu Ile Arg Gly Gly Gly Leu Leu Lys Tyr Ser Asn
 65 70 75 80
 Leu Leu Val Arg Asp Phe Arg Pro Thr Asp Gln Glu Glu Ile Lys Thr
 85 90 95
 Leu Glu Arg Tyr Met Cys Ser Arg Phe Phe Ile Asp Phe Pro Asp Ile
 100 105 110
 Leu Glu Gln Gln Arg Lys Leu Glu Thr Tyr Leu Gln Asn His Phe Ala
 115 120 125
 Glu Glu Glu Arg Ser Lys Tyr Asp Tyr Leu Met Ile Leu Arg Arg Val
 130 135 140
 Val Asn Glu Ser Thr Val Cys Leu Met Gly His Glu Arg Arg Gln Thr
 145 150 155 160
 Leu Asn Leu Ile Ser Leu Leu Ala Leu Arg Val Leu Gly Gly Thr Lys
 165 170 175
 His His Pro Pro Val Pro Pro Arg Ser Pro Val Thr Thr Ser Gly Pro
 180 185 190
 Leu Ser Gln
 195

<210> 3579
 <211> 755
 <212> DNA
 <213> Homo sapiens

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 180

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 240
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 300
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 420
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<210> 3580

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3580

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			20						25				30		
Glu	Thr	Lys	Gln	His	Glu	Lys	Trp	Leu	Ser	Gln	Pro	Thr	Cys	Ser	Asp
		35					40					45			
Met	Pro	Arg	Asn	Phe	Ser	Ser	Gly	Pro	Gly	Ser	Gly	Gly	Leu	Leu	Ile
		50				55					60				
Phe	Ser	Gln	Asp	Ile	Val	Leu	Ser	Trp	Asn	Leu	Ala	Gly	Gly	Trp	Ser
65				70					75					80	
Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
			85						90					95	
Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
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<210> 3581

<211> 2132

<212> DNA

<213> Homo sapiens

<400> 3581

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<211> 138

<212> PRT

<213> Homo sapiens

<400> 3582

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<211> 1554

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<213> Homo sapiens

<400> 3583

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<211> 356

<212> PRT

<213> Homo sapiens

<400> 3584

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 3586

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			20					25					30		
Arg	Ser	Cys	Trp	Arg	Lys	Trp	Lys	Gln	Leu	Ser	Arg	Leu	Gln	Arg	Asn
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<211> 499

<212> PRT

<213> Homo sapiens

<400> 3588

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<211> 675

<212> DNA

<213> Homo sapiens

<400> 3589

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120

aatagttctt gaccaggtc cctccatgaa cctcgaagct gaccagcca taggggggat
180

accttcattt cagtcccagc agcctcccc aaccagtcag ggtccctgaa gagcatctgg
 240
 ctctccacaa gacaatagac aggaagggga cccagtggcc cccccaagct tagctaattgt
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 gagtgaagaa ccaggcagaa cccaggcagc agatgggata ggagtttcca agccagtgtc
 360
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 420
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 480
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<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3590

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Asn	Leu	Ile	Leu	Pro	Ser	Pro	Asp	Ser	Ser	Pro	Gln	Ala	Lys	Pro	Leu
			20					25					30		
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
		35					40					45			
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
	50					55				60					
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
65					70					75				80	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
			85						90					95	
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
			100					105						110	
Phe	Thr	His	Ile	Ser											
			115												

<210> 3591

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3591

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 120
 cgatggtctt catcaggggt gattcctaata gaaaaaatac gaaatattgg aatctcagct
 180

cacattgatt ctgggaaaac tacattaaca gaacgagtcc ttactacac tggcagaatt
 240
 gcaaagatgc atgaggtgaa aggtaaagat ggagttggtg ctgtcatgga ttccatggaa
 300
 ctagagagac aaagaggaat cactattcag tcagcagcca cttacaccat gtggaaagat
 360
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 gccctgagag tggtggatgg tgcagtcctt gttctctgtg ctgttgagg ggtacagtgc
 480
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 540
 aacaaattgg accgaatggg ctccaacca gccagggccc tgcagcaaat gaggtctaaa
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 669

<210> 3592

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3592

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		20						25					30		
Lys	Gln	Val	Asn	Trp	Lys	Ala	Cys	Arg	Trp	Ser	Ser	Ser	Gly	Val	Ile
		35					40					45			
Pro	Asn	Glu	Lys	Ile	Arg	Asn	Ile	Gly	Ile	Ser	Ala	His	Ile	Asp	Ser
	50					55					60				
Gly	Lys	Thr	Thr	Leu	Thr	Glu	Arg	Val	Leu	Tyr	Thr	Gly	Arg	Ile	
65				70					75					80	
Ala	Lys	Met	His	Glu	Val	Lys	Gly	Lys	Asp	Gly	Val	Gly	Ala	Val	Met
				85				90						95	
Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
			100					105					110		
Ala	Thr	Tyr	Thr	Met	Trp	Lys	Asp	Val	Asn	Ile	Asn	Ile	Ile	Asp	Thr
		115					120						125		
Pro	Gly	His	Val	Asp	Phe	Thr	Ile	Glu	Val	Glu	Arg	Ala	Leu	Arg	Val
	130					135					140				
Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145					150					155				160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
				165				170						175	
Leu	Thr	Phe	Ile	Asn	Lys	Leu	Asp	Arg	Met	Gly	Ser	Asn	Pro	Ala	Arg
			180				185						190		
Ala	Leu	Gln	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met
	195						200						205		
Gln	Ile	Pro	Met	Gly	Leu	Glu	Gly	Asn	Phe	Lys	Gly	Ile	Val	Asp	
	210					215							220		

<210> 3593
 <211> 1005
 <212> DNA
 <213> Homo sapiens

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 120
 cctcaagca acggatcccc atggcgcttg ttgggcgcgt tgtgcctgca gcgccacct
 180
 gtagtctcca agccgttgac cccattgcag gaagagatgg cgtctctact gcagcagatt
 240
 gagatagaga gaagcctgta ttcagaccac gagcttcgtg ctctggatga aaaccagcga
 300
 ctggcaaaga agaaagctga ccttcattgat gaagaagatg aacaggatat attgctggcg
 360
 caagatttgg aagatatgtg ggagcagaaa tttctacagt tcaaacttgg agctcgcata
 420
 acagaagctg atgaaaagaa tgaccgaaca tccctgaaca ggaagctaga caggaacctt
 480
 gtcctgtag ttagagagaa gtttgagac caggatgttt ggatactgcc ccaggcagag
 540
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 aacaacatgg aagccaagtt cctaggaaat gcaccctgtg ggcactacac attcaagttc
 660
 cccagcga tgcggacaga gagtaacctc ggagccaagg tgttcttctt caaagcactg
 720
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 780
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 840
 gacctctgat gggccgagct gcctgtggac ggtgctcaga caagtctggg attagagcct
 900
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 1005

<210> 3594
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 3594
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 20 25 30
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 35 40 45
 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

50		55		60											
Pro	Leu	Thr	Pro	Leu	Gln	Glu	Glu	Met	Ala	Ser	Leu	Leu	Gln	Gln	Ile
65					70					75					80
Glu	Ile	Glu	Arg	Ser	Leu	Tyr	Ser	Asp	His	Glu	Leu	Arg	Ala	Leu	Asp
			85						90					95	
Glu	Asn	Gln	Arg	Leu	Ala	Lys	Lys	Lys	Ala	Asp	Leu	His	Asp	Glu	Glu
			100					105					110		
Asp	Glu	Gln	Asp	Ile	Leu	Leu	Ala	Gln	Asp	Leu	Glu	Asp	Met	Trp	Glu
		115						120					125		
Gln	Lys	Phe	Leu	Gln	Phe	Lys	Leu	Gly	Ala	Arg	Ile	Thr	Glu	Ala	Asp
		130				135						140			
Glu	Lys	Asn	Asp	Arg	Thr	Ser	Leu	Asn	Arg	Lys	Leu	Asp	Arg	Asn	Leu
145					150					155					160
Val	Leu	Leu	Val	Arg	Glu	Lys	Phe	Gly	Asp	Gln	Asp	Val	Trp	Ile	Leu
			165						170					175	
Pro	Gln	Ala	Glu	Trp	Gln	Pro	Gly	Glu	Thr	Leu	Arg	Gly	Thr	Ala	Glu
			180					185					190		
Arg	Thr	Leu	Ala	Thr	Leu	Ser	Glu	Asn	Asn	Met	Glu	Ala	Lys	Phe	Leu
		195					200					205			
Gly	Asn	Ala	Pro	Cys	Gly	His	Tyr	Thr	Phe	Lys	Phe	Pro	Gln	Ala	Met
	210				215						220				
Arg	Thr	Glu	Ser	Asn	Leu	Gly	Ala	Lys	Val	Phe	Phe	Phe	Lys	Ala	Leu
225					230					235					240
Leu	Leu	Thr	Gly	Asp	Phe	Ser	Gln	Ala	Gly	Asn	Lys	Gly	His	His	Val
			245						250					255	
Trp	Val	Thr	Lys	Asp	Glu	Leu	Gly	Asp	Tyr	Leu	Lys	Pro	Lys	Tyr	Leu
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<210> 3595

<211> 1903

<212> DNA

<213> Homo sapiens

<400> 3595

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180
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240
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300
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360
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420
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480
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540

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cttacctttc tggaggagga tgacaaggac ctgtacatcc tctggaaggg gccctccttc
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1800
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1903

<210> 3596

<211> 496

<212> PRT

<213> Homo sapiens

<400> 3596

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Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu			
	35	40	45
Ala His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro Ile			
	50	55	60
Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp Pro Phe Gly			
65	70	75	80
Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn Lys Ala Met			
	85	90	95
Ser Ala Lys Phe Glu Arg Leu Val Ala Ser Ala Glu Gln Leu Leu Lys			
	100	105	110
Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe Leu Thr Pro			
	115	120	125
Asp Phe Thr Ser Leu Asp Val Leu Thr Phe Ala Gly Ser Gly Ile Pro			
	130	135	140
Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln Thr Glu Gly			
145	150	155	160
Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala Tyr Ala Thr			
	165	170	175
Gln Arg Glu Lys Leu Thr Phe Leu Glu Glu Asp Asp Lys Asp Leu Tyr			
	180	185	190
Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly Leu His Glu			
	195	200	205
Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp Glu Lys Gly			
	210	215	220
Ala Phe Asn Phe Asp Gln Glu Thr Val Ile Asn Pro Glu Thr Gly Glu			
225	230	235	240
Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp Ser Lys Phe			
	245	250	255
Ser Thr Ile Ala Ser Ser Tyr Glu Glu Cys Arg Ala Glu Ser Val Gly			
	260	265	270
Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe Gly Phe Glu			
	275	280	285
Gly Ala Asp Ala Glu Asp Val Ile Tyr Val Asn Trp Leu Asn Met Val			
	290	295	300
Arg Ala Gly Leu Leu Ala Leu Glu Phe Tyr Thr Pro Glu Ala Phe Asn			
305	310	315	320
Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu Arg Val Leu			
	325	330	335
Leu Glu Ala Gly Glu Gly Leu Val Thr Ile Thr Pro Thr Thr Gly Ser			
	340	345	350
Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser Lys Ile Arg			
	355	360	365
Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg Leu Gln Val			
	370	375	380
Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu Tyr Glu Gly			
385	390	395	400
Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu Thr Leu Arg			
	405	410	415
Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile Val Gln Pro			
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Asn Thr Arg Leu Glu Gly Asn Gly Ser Asp Val Gln Leu Leu Glu Tyr			

<210> 3598

<211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3598

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Asp Tyr Asn Lys Asp Asp Met Ser Tyr Arg Arg Ile Ser Ala Val Glu
 35           40           45
Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg
 50           55           60
Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys
 65           70           75           80
His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala
 85           90           95
Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu
100          105          110
Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile
115          120          125
Lys Ser Gln Leu Lys Glu Gln Asp Gln Lys Trp Gln Asp Asp Leu Ala
130          135          140
Lys Trp Lys Asp Arg Arg Lys Ser Tyr Thr Ser Asp Leu Gln Lys
145          150          155

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<210> 3599
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 3599

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660

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691

<210> 3600
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<212> PRT
<213> Homo sapiens

<400> 3600
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Met Val Glu Val Arg Ser Trp Ser Gly Ser Leu Val Gly Trp Leu Ala
35 40 45
Pro Arg Pro Leu Ser Val Pro Ile Glu His Leu Leu Gly Ala Lys Asn
50 55 60
Cys Cys Arg His Gly Gly Gln Trp Val Arg Arg Ala Val Pro Ala Val
65 70 75 80
Leu Ser Leu Val Gly Ala Ser Ser Leu His His Ala Val Tyr Leu Phe
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Leu Leu

<210> 3601
<211> 2963
<212> DNA
<213> Homo sapiens

<400> 3601
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420
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<211> 299

<212> PRT

<213> Homo sapiens

<400> 3602

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Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
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Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
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 <213> Homo sapiens

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<211> 324
 <212> PRT
 <213> Homo sapiens

<400> 3606

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Lys	Gly	Asp	Tyr	Tyr	Glu	Ala	His	Gln	Met	Tyr	Arg	Thr	Leu	Phe	Phe
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Arg	Tyr	Met	Ser	Gln	Ser	Lys	His	Thr	Glu	Ala	Arg	Glu	Leu	Met	Tyr
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Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His	Gly	Gln	Gln	Asn	Ser	Ala	Ala
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Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser	Leu	Glu	Lys	Ala	Glu	Val	Glu
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Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu	Ala	Lys	Val	Phe	Ser	Leu	Met
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Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr	Phe	Val	Ser	Arg	Ala	Leu	Lys
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Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu	Gly	His	Pro	Arg	Leu	His	Gln
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Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu	Gln	Asn	Tyr	Cys	Glu	Ser	Arg
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Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly	Glu	Gly	Cys	Ala	Asn	Met	Leu
			165						170					175	
Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe	Arg	Ser	Glu	Val	Asp	Met	Phe
		180						185					190		
Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu	Cys	Leu	Lys	Asn	Lys	Ser	Ser
		195					200					205			
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			260					265					270		
Leu	Asp	Arg	Ile	Gly	Gln	Leu	Phe	Phe	Gly	Val	Pro	Pro	Lys	Gln	Thr
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Ser	Ser	Tyr	Gly	Gly	Leu	Leu	Gly	Asn	Leu	Leu	Thr	Ser	Leu	Met	Gly
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 <212> DNA
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<400> 3607

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<212> PRT

<213> Homo sapiens

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Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
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Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
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<210> 3609

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 3609

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<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

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			20					25					30		
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro
			35				40					45			
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp
	50					55					60				
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu
65					70				75					80	
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr
				85					90					95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr
			100					105					110		
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met
			115				120					125			
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly
	130					135					140				
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser
145					150					155				160	
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro
				165					170					175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr
			180					185					190		
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser
	195						200					205			
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln
	210				215						220				
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys
225					230					235				240	
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro
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Leu	Lys	Lys	Ser	Cys	Ile	Ser	Val	Leu	Lys	Arg	Arg				
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<210> 3611

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3611

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120
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gacccacgca gggcttcagt gacaaggagg acgtttgggc acagcggcat tgcagtgcac
240
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300
cagttctatc tggacagaaa gcagagtaag tccaaaatcc atgcagcacg cagcctgagt
360
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540
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660
cccattgttc ggagaagaat aggaacagcc ttcaaactgg atgaacagaa aatcctgccc
720
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<210> 3612

<211> 272

<212> PRT

<213> Homo sapiens

<400> 3612

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Trp	Leu	Gly	Leu	Ser	Tyr	Lys	Gly	Ile	Phe	Gln	Tyr	Asp	Tyr	His	Asp
		20						25				30			
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
		35					40					45			
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
	50					55					60				
Ala	Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His
65					70				75					80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
				85				90						95	
Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
			100					105					110		
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<210> 3614
<211> 123
<212> PRT
<213> Homo sapiens
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<400> 3614

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          20           25           30
Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
          35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
          50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
          65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
          85           90           95
Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
          100          105          110
Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro
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<210> 3615

<211> 1388

<212> DNA

<213> Homo sapiens

<400> 3615

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120
cagtccccgc gagtccagat gcctgtccag cctccaagca aagacacaga agagatggaa
180
gcagaggggtg attctgctgc tgagatgaat ggggaggagg aagagagtga ggaggagcgg
240
agcggcgagcc agacagagtc agaagaggag agctccgaga tggatgatga ggactatgag
300
cgacgccgca gcgagtgtgt cagtgagatg ctggacctag agaagcagtt ctcgagagcta
360
aaggagaagt tgttcaggga acgactgagt cagctgcggt tgcggctgga ggaagtgggg
420
gctgagagag cccctgaata cacggagccc cttggggggc tgcagcggag cctcaagatt
480
cgcattcagg tggcagggat ctacaagggc ttctgtctgg atgtgatcag gaataagtac
540
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600
acgctgcagg gggagctgca ggagcggatc cagaggctgg aggaggaccg ccagagcctg
660
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720
gactccctgc cgccagcaa gaggaagaag gcacctctgg tttctggccc atacatcgtg
780
tacatgcttc aagagatcgg catcctggag gactggacag ccatcaaaaa ggctagggca
840
gctgtgtccc ctcaagaagag aaaatcggat gacaggcgga cccacaggcc cctcagggtc
900

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tgcccagcca ggctcctgtg gtgctgctgg gccctccac tccatctggc actggcctgg
 960
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 1020
 gcaaggctgc tgtctccatc cctgagccgc ctgccacctc ccactcctga agatccatct
 1080
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 1140
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 1200
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 1260
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<210> 3616

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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Gly	Asp	Ser	Ala	Glu	Met	Asn	Gly	Glu	Glu	Glu	Glu	Ser	Glu	Glu	
			20				25					30			
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Glu	Ser	Ser	Glu	Met
		35				40						45			
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu	Met
	50				55						60				
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe	Arg
65				70					75					80	
Glu	Arg	Leu	Ser	Gln	Leu	Arg	Leu	Arg	Leu	Glu	Glu	Val	Gly	Ala	Glu
			85				90							95	
Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser	Leu
		100					105					110			
Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu	Asp
	115						120					125			
Val	Ile	Arg	Asn	Lys	Tyr	Glu	Cys	Glu	Leu	Gln	Gly	Ala	Lys	Gln	His
	130					135					140				
Leu	Glu	Ser	Glu	Lys	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu	Leu	
145				150					155					160	
Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp	Leu
			165						170					175	
Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser	Arg
			180				185					190			
Ser	Trp	Asp	Ser	Leu	Pro	Pro	Ser	Lys	Arg	Lys	Lys	Ala	Pro	Leu	Val
	195						200					205			
Ser	Gly	Pro	Tyr	Ile	Val	Tyr	Met	Leu	Gln	Glu	Ile	Gly	Ile	Leu	Glu
	210					215					220				
Asp	Trp	Thr	Ala	Ile	Lys	Lys	Ala	Arg	Ala	Ala	Val	Ser	Pro	Gln	Lys

225					230					235				240
Arg	Lys	Ser	Asp	Asp	Arg	Arg	Thr	His	Arg	Pro	Leu	Arg	Val	Cys
				245					250					255
Ala	Arg	Leu	Leu	Trp	Cys	Cys	Trp	Ala	Leu	Pro	Leu	His	Leu	Ala
			260					265					270	
Ala	Trp	Thr	Pro	Pro	Leu	Pro	Ser	Ser	Arg	Pro	Ala	Gln	Leu	Trp
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Trp	Ser													
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<210> 3617

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3617

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120
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180
atagtataga tgaatgccct gaggggactg tgaacaagct ctgcccctct taggaaatca
240
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300
gggaatggtt taggtcctgg catctttgaa ggggttggaa gggctggcag gaggcactga
360
gggccctggg ccctgggcca ggtggtgaat tacagcgact cacggacagc agaagagatc
420
tgtgagagca gctccaagat gatcaccttc atcgacctgg caggccacca taagtaccta
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540
gccaaactg ggattgctgg caccacaagg gaacatctgg ggctggccct ggccctgaaa
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660
acagtacgcc agctggagcg ggtcctcaag cagcctggct gccacaaggc ccccatgctg
720
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780
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<210> 3618

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3618

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Ala	Glu	Glu	Ile	Cys	Glu	Ser	Ser	Ser	Lys	Met	Ile	Thr	Phe	Ile	Asp

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<210> 3619
<211> 948
<212> DNA
<213> Homo sapiens
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120
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180
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240
tcatctcatt agggcccccac agtggcatta ggatgcacct ctcggcggtg ttcaacgccc
300
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360
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420
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480
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540
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720
cagacgtggc cctcatcgcc aaccgcttca accccgacaa cctcatgcac gtctttcatg
780
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840
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900

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948

<210> 3620
<211> 159
<212> PRT
<213> Homo sapiens

<400> 3620
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35 40 45
Pro Gly Ala Ser Ser Gln Pro Cys Ser Thr Tyr Pro Pro Trp Arg Thr
50 55 60
Thr Thr Leu Ser Thr Ser Thr Ser Trp Ser Cys Leu Leu Leu Pro Cys
65 70 75 80
Ala Ser Cys Pro Ser Arg Cys Ser Cys Gln Thr Trp Pro Ser Ser Pro
85 90 95
Thr Ala Ser Thr Pro Thr Thr Ser Cys Thr Ser Phe Met Thr Thr Cys
100 105 110
Cys His Ser Ser Thr Pro Cys Gly Ser Phe Pro Ala Trp Pro Thr Arg
115 120 125
His Gly Ser Ser Ser Trp Arg Ala Gly Ala Arg Val His Thr Ser Thr
130 135 140
Ser Thr Ser Cys Ser Ala Pro Ser Ser Leu Ser Cys Gly His Ser
145 150 155

<210> 3621
<211> 2934
<212> DNA
<213> Homo sapiens

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120
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180
ccttaattgg gcttgcagtg ctaaaaagca gatcggttctc tctgaggttt tcccaacagt
240
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300
aacataataa gatccttgcc agcacattac agaataatttt tgttgaacct tcttgagaat
360
tcagagaaac tgctgagtga ccactgaacg aaaagatcta atcttaaggc ttacgcgtgt
420
tccatccacc acatcagaac aatgtcgtat gtttttgtaa atgattcttc tcagactaac
480
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540

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660
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 2280
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<210> 3622

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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			20					25					30		
Glu	Ser	Gly	Phe	Asp	Pro	Asn	Ile	Arg	Asp	Ser	Arg	Gly	Arg	Thr	Gly
		35					40					45			
Leu	His	Leu	Ala	Ala	Ala	Arg	Gly	Asn	Val	Asp	Ile	Cys	Gln	Leu	Leu
		50				55					60				
His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
65					70					75				80	
Ala	Leu	His	Leu	Cys	Gly	His	Val	Asp	Thr	Ile	Gln	Phe	Leu	Val	Ser
				85					90					95	
Asn	Gly	Leu	Lys	Ile	Asp	Ile	Cys	Asn	His	Gln	Gly	Ala	Thr	Pro	Leu
			100					105					110		
Val	Leu	Ala	Lys	Arg	Arg	Gly	Val	Asn	Lys	Asp	Val	Ile	Arg	Leu	Leu
		115					120					125			
Glu	Ser	Leu	Glu	Glu	Gln	Glu	Val	Lys	Gly	Phe	Asn	Arg	Gly	Thr	His
		130				135					140				
Ser	Lys	Leu	Glu	Thr	Met	Gln	Thr	Ala	Glu	Ser	Glu	Ser	Ala	Met	Glu
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Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu

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 180 185 190
 Trp Arg Val Leu Leu Leu Ile Phe Val Ile Ala Leu Leu Ser Leu Gly
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 210 215 220
 Glu Leu Val His
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<210> 3623

<211> 586

<212> DNA

<213> Homo sapiens

<400> 3623

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<210> 3624

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3624

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<211> 4799

<212> DNA

<213> Homo sapiens

<400> 3625

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<210> 3626

<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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<211> 1760

<212> DNA

<213> Homo sapiens

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<210> 3628

<211> 440

<212> PRT

<213> Homo sapiens

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<210> 3629
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<210> 3630
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<400> 3630
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 Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro
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<210> 3631

<211> 864

<212> DNA

<213> Homo sapiens

<400> 3631

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480
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540
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600
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660
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720
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<210> 3632

<211> 222

<212> PRT

<213> Homo sapiens

<400> 3632

Met	Gln	Tyr	Leu	Glu	Lys	Arg	Lys	Asn	Pro	Val	Cys	His	Phe	Val	Thr
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Pro	Leu	Asp	Gly	Ser	Val	Asp	Val	Asp	Glu	His	Arg	Arg	Pro	Glu	Ala

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<210> 3633
<211> 1570
<212> DNA
<213> Homo sapiens
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aggagagcct gggcaagcat tcttaggttg atgctggggc ccagagtagc agtgagcacc
180
ctgtgtgaag atggcatttc tcaactgatta ttggaaaagc acaagagcca cgtgctggag
240
ccattgtcca gccttgccct ggaggagcag tgtctggcct tgtccctaga ttggtccact
300
gggaaaactg gaagggcccg ggaccagccc ttgaagatca tcagcagtga ctccacaggg
360
cagctccacc tcctgatggc gaatgagacg aggcccaggc tgcagaaagt ggccctcatgg
420
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480
tattcagggg gcgacgatgg ccttctgagg ggctgggaca ccaggggtacc cggcaaattt
540
ctcttcacca gcnaaaagac acaccatnng ggtgtgtgca gcatccagag cagccctcat
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cgggagcaca tcctggccac gggaaagctat gatgaacaca tcctactgtg ggacacacga
660
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 780
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 1260
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 1380
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<210> 3634

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3634

Met	Val	Asn	Glu	Thr	Arg	Pro	Arg	Leu	Gln	Lys	Val	Ala	Ser	Trp	Gln
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Ala	His	Gln	Phe	Glu	Ala	Trp	Ile	Ala	Ala	Phe	Asn	Tyr	Trp	His	Pro
		20						25					30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
		35					40					45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
		50				55					60				
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65					70				75					80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85					90					95		
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
			100					105					110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

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<210> 3635
<211> 835
<212> DNA
<213> Homo sapiens
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120
gttttactta aagatgaacc ccagcagact gctgctcaga tgggttgtgc gccaatccag
180
cctctggcga tgccctcaagc tttgcctctg gcggcaggtc ccttgccctcc aggggtccatc
240
gcaaactctta cagaactgca aggagtgata gttggacagc cagtactggg ccaagcacag
300
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360
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420
tctgcaatgt caaacactcc taccacagct attgctgcat ccatttccca acctcagact
480
ccaactccaa gtcctatcat ctctccttca gccatgcttc ctatctaccc tgccattgat
540
attgatgcac agactgagag taatcatgac acggcgctaa cacttgcttg tgctgggtggc
600
cacgaggaac tggtagaaac actgctagag agaggagcta gtatagagca ccgagacaag
660
aaagggtttta ctccactcat cttggctgcc acagctgggc atgttggtgt tgtggaaata
720
ttgctggaca atgggtgcaga cattgaagcc cagtctgaaa gaaccaagga cacaccactc
780

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835

<210> 3636
<211> 278
<212> PRT
<213> Homo sapiens

<400> 3636
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20 25 30
Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln
35 40 45
Gln Thr Ala Ala Gln Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met
50 55 60
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile
65 70 75 80
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu
85 90 95
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr
100 105 110
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr
115 120 125
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser
130 135 140
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr
145 150 155 160
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr
165 170 175
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala
180 185 190
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu
195 200 205
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr
210 215 220
Pro Leu Ile Leu Ala Ala Thr Ala Gly His Val Gly Val Val Glu Ile
225 230 235 240
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys
245 250 255
Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val
260 265 270
Glu Leu Leu Leu Ala Arg
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<210> 3637
<211> 2128
<212> DNA
<213> Homo sapiens

<400> 3637
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120
cctgccaaacc cctgctcttc caggtcgggc cccgggggttc tgcggctggt agggacagag
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gcaaagaagg gcaggacggg ccggtttccc gtggatgttc ccgcccgaga aagacagcaa
240
gttgtgtgtg cgcgccgggac gcgggaggga aggtagccgc cgcgccccag ccatggacca
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480
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660
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720
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780
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1380
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1620
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1680

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 1980
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 2128

<210> 3638
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 3638
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 Phe Leu Cys Ala Ala Thr Ser Cys Val Gly Phe Phe Met Pro Tyr Trp
 20 25 30
 Leu Trp Gly Ser Gln Leu Gly Lys Pro Val Ser Phe Gly Thr Phe Arg
 35 40 45
 Arg Cys Ser Tyr Pro Val His Asp Glu Ser Arg Gln Met Met Val Met
 50 55 60
 Val Glu Glu Cys Gly Arg Tyr Ala Ser Phe Gln Gly Ile Pro Ser Ala
 65 70 75 80
 Glu Trp Arg Ile Cys Thr Ile Val Thr Gly Leu Gly Cys Gly Leu Leu
 85 90 95
 Leu Leu Val Ala Leu Thr Ala Leu Met Gly Cys Cys Val Ser Asp Leu
 100 105 110
 Ile Ser Arg Thr Val Gly Arg Val Ala Gly Gly Ile Gln Phe Leu Gly
 115 120 125
 Gly Leu Leu Ile Gly Ala Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asp
 130 135 140
 Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp
 145 150 155 160
 Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly
 165 170 175
 Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly
 180 185 190
 Lys Lys Gln Lys His Tyr Pro Tyr
 195 200

<210> 3639
 <211> 726
 <212> DNA
 <213> Homo sapiens

<400> 3639

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 120
 aagactaaca gtgggttatct ctcagcggga ttataaatgt tttggttttt tttttttttt
 180
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 240
 aagcacatta atgtaggcag attatcaatg ttatgcattt cactgattgc atatctcttt
 300
 ttttatcaat ggtgaacatt gcaaattgatt gatacgtttt tcttaggaag tggcattgcc
 360
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 420
 gcaataaaaa aatttcacct tttaattggat ttaaaaggga aaagttgggg tgttgggttc
 480
 tccagggcat ttctttcatt atgagtgaca tttttctgaa aggaacgtga tctcgttttc
 540
 tagccgcattg aagcatttct ccaacaagac ccactgtacc agtcctggga tctccacacc
 600
 tgtgccttct ccctgtctct tctaggtcct gattctcacc tctgcctgtg taataaccct
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 720
 taagat
 726

<210> 3640

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3640

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Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
	50					55					60				
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70					75				80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
			100												

<210> 3641

<211> 455

<212> DNA

<213> Homo sapiens

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 120
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 180
 gagctcgaga cgctcgcgcg ctacacctct gggcccctgt gcgtggggaa gtcaggaaga
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 300
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<210> 3642

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3642
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 20 25 30
 Gln Ser Pro Glu Glu Ser Arg Ser Ser His Ala Ser Arg Asp Leu Ala
 35 40 45
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu
 50 55 60
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser
 65 70 75 80
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala
 85 90 95
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro
 100 105 110
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser
 115 120 125
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala
 130 135 140
 Phe Lys Thr Arg
 145

<210> 3643

<211> 2243

<212> DNA

<213> Homo sapiens

<400> 3643
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120
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360
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540
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600
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660
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1680

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 1860
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 1920
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 1980
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 2040
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 2100
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 2160
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 aaaaaaaaaa aaaaaaaaaa aaa
 2243

<210> 3644

<211> 560

<212> PRT

<213> Homo sapiens

<400> 3644

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Gln	Val	Ala	Ser	Lys	Ala	Glu	Glu	Asn	Leu	Leu	Met	Val	Leu	Gly	Thr
			20					25					30		
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu	Thr
		35				40					45				
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro	Ile
	50				55					60					
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys	Tyr
65				70				75					80		
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys	Phe
			85					90					95		
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn	Asn
		100					105						110		
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu	Asp
	115					120						125			
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu	Tyr
	130					135					140				
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly	Asp
145				150						155				160	
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu	Asp
			165					170					175		
Lys	Leu	Leu	Asn	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu	Ile
		180					185					190			
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val	Asn
	195					200						205			
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser	Ser

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      210              215              220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala
225              230              235              240
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala
      245              250              255
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu
      260              265              270
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val
      275              280              285
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe
      290              295              300
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu
305              310              315              320
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu
      325              330              335
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile
      340              345              350
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu
      355              360              365
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr
      370              375              380
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn
385              390              395              400
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Glu Phe Asn Asp
      405              410              415
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu
      420              425              430
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp
      435              440              445
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys
      450              455              460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp
465              470              475              480
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp
      485              490              495
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu
      500              505              510
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser
      515              520              525
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu
      530              535              540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu
545              550              555              560

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<210> 3645

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3645

acgcgtacat gggcaggtgg tagcggttat agtgcaggta gtcaagagtg cttctctcca
60

ccagggtttt gtagatggat tcctcaaaaa ctcttttgag gtattgcctg ggcttctcag
120

tcgggttgat ttctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt
 180
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt
 240
 ggaacagggc caggcaccac ggctcgggta agtagctata gagatctgtg atcagggtttt
 300
 catcgtaccg agcacacagg ttgttgagga gttgctcgtg ctggccaaac aagcggatgt
 360
 agttggaggc ggggaagggc tccctagaaa ggcacgtgat ggtttccacc attttatact
 420
 tgtaatatg aattcgggaag taagtcccat ttttcgcact gccgggttact agttctaaac
 480
 cataattagg ctgggccatt tgtacctcca agggagttgg aatggcaggc ttggcaatat
 540
 gcagataatg gtaagaccca ggaagaatgc ccccttgaat cttggctccc ttgtacatgg
 600
 ggatgagccg gtcaagatta gctgggtggct cggtcacagg ctcaagggtt ggatcaaaga
 660
 gatgtagcat agctgctgcc agctgaaagc caatttcttt ggaactgaag ttgctggtgg
 720
 gccattcat ttgagtagta tctattggag aatttgggtga gggagccagc agctctgatg
 780
 gctatgtcgt tgggtgtggaa gttggtatca atcacaagtc gac
 823

<210> 3646

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
1				5				10						15	
Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
		20						25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
	35					40					45				
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70				75					80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85					90						95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100					105						110	
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115						120					125		
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135					140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150					155					160
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170						175	
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

		180						185						190					
Ala	His	Gln	Ile	Glu	Asp	Glu	Glu	Ile	Asn	Pro	Thr	Glu	Lys	Pro	Arg				
		195						200					205						
Gln	Tyr	Leu	Lys	Arg	Val	Phe	Glu	Glu	Ser	Ile	Tyr	Lys	Thr	Leu	Val				
		210						215					220						
Glu	Arg	Ser	Thr	Leu	Asp	Tyr	Leu	His	Tyr	Asn	Arg	Tyr	His	Leu	Pro				
225					230					235					240				
Met	Tyr	Ala																	

<210> 3647

<211> 584

<212> DNA

<213> Homo sapiens

<400> 3647

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acgcgtcggg cgagcgccgc gcctacgggc ccccttttct gcgcgaccgc gtggctgtgg
60
gcgcggatgc ctttgagcgc ggtgacttct cactgcgtat cgagccgctg gaggtcgccg
120
acgagggcac ctactcctgc cacctgcacc accattactg tggcctgcac gaacgccgcg
180
tcttccacct gacggtegcc gaacccacg cggagccgcc ccccggggc tctccgggca
240
acggctccag ccacagcggc gcccaggcc caggtgaagg aggcctcctt gggacccggg
300
aaggcgggag cccacccac cgggggttgc tctgcgcccg ctgtcccttg cccgaggccc
360
gcggatccca gcgggnnggc cgtggcccgg gtcggggcgc aggtcttctt ggtacctgac
420
gccgctccga ccccgcggtc cccgcagacc ccacactggc gcgcggccac aacgtcatca
480
atgtcatcgt ccccgagagc cgagcccact tcttccagca gctgggctac gtgctggcca
540
cgctgctgct cttcatcctg ctactggtca ctgtcctcct ggcc
584

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<210> 3648

<211> 63

<212> PRT

<213> Homo sapiens

<400> 3648

Thr	Arg	Ala	Ser	Ala	Ala	Pro	Thr	Gly	Pro	Phe	Phe	Cys	Ala	Thr					
1			5					10				15							
Ala	Trp	Leu	Trp	Ala	Arg	Met	Pro	Leu	Ser	Ala	Val	Thr	Ser	His	Cys				
		20						25				30							
Val	Ser	Ser	Arg	Trp	Arg	Ser	Pro	Thr	Arg	Ala	Pro	Thr	Pro	Ala	Thr				
		35					40					45							
Cys	Thr	Thr	Ile	Thr	Val	Ala	Cys	Thr	Asn	Ala	Ala	Ser	Ser	Thr					
50						55						60							

<210> 3649

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3649

```

naaaaataat gcagacataa aatgaaaaaa gattgaagat tgttacagag aaataggtga
60
ggaagcatga tactgaaggc ttgtcactcc tgttttcact tccacacaga caagcatatt
120
tgctcattgt ttgctgtgct cccctttttt tttcagggtg ctatttctgc agatgtcaaa
180
gaagttctgt taactgatgg gaatgaaaag gccatcagaa atgtgcaaga catcatcaca
240
aggaatcaga aggctggtgt gtttaagacc cagaaaatat caagctgcgt tttacgatgg
300
gataatgaga cagatgtctc tcaactggaa ggacattttg acattgttat gtgtgctgac
360
tgctgtttc tggaccagta cagagccagc cttgttgatg caataaagag attactccag
420
cccaggggga aagcgatggg atttgcccca cgccgagggg atactttaaa ccagttttgc
480
aatctagctg aaaaagctgg tttctgtatc caaagacatg aaaattatga tgaacacatt
540
tcaaacttcc actccaagtt gaaaaaggaa aaccgggaca tatatgaaga aaaccttcat
600
taccgcctc tgcttatttt gaccaaacat ggatagaaga ttaagctt
648

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<210> 3650

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3650

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Met Ile Leu Lys Ala Cys His Ser Cys Phe His Phe His Thr Asp Lys
1           5           10           15
His Ile Cys Ser Leu Phe Ala Val Leu Pro Phe Phe Phe Gln Val Ala
20           25           30
Ile Ser Ala Asp Val Lys Glu Val Leu Leu Thr Asp Gly Asn Glu Lys
35           40           45
Ala Ile Arg Asn Val Gln Asp Ile Ile Thr Arg Asn Gln Lys Ala Gly
50           55           60
Val Phe Lys Thr Gln Lys Ile Ser Ser Cys Val Leu Arg Trp Asp Asn
65           70           75           80
Glu Thr Asp Val Ser Gln Leu Glu Gly His Phe Asp Ile Val Met Cys
85           90           95
Ala Asp Cys Leu Phe Leu Asp Gln Tyr Arg Ala Ser Leu Val Asp Ala
100          105          110
Ile Lys Arg Leu Leu Gln Pro Arg Gly Lys Ala Met Val Phe Ala Pro
115          120          125
Arg Arg Gly Asn Thr Leu Asn Gln Phe Cys Asn Leu Ala Glu Lys Ala
130          135          140
Gly Phe Cys Ile Gln Arg His Glu Asn Tyr Asp Glu His Ile Ser Asn
145          150          155          160
Phe His Ser Lys Leu Lys Lys Glu Asn Pro Asp Ile Tyr Glu Glu Asn

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165 170 175
 Leu His Tyr Pro Pro Leu Leu Ile Leu Thr Lys His Gly
 180 185

<210> 3651

<211> 2469

<212> DNA

<213> Homo sapiens

<400> 3651

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 60
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 120
 tttgaagggg ccactgtggt catcctgaac atgcccgaag gaacagagtt tgggattgac
 180
 tataactcct gggaggtcgg gcccgaagttc cggggcggtga agatgatccc tccaggcatc
 240
 cacttcctcc actacagctc tgtggacaag gctaataccga aggaagtagg ccctcgatatg
 300
 ggtttcttcc ttagcctgca ccagcggggg ctgacagtgc tgcgctggag cacactcagg
 360
 gaagaggtag acctgtcccc agcccagag tctgaggtgg aggccatgag ggccaacctc
 420
 caggagctgg accagttcct ggggccttac ccatatgcca ccctgaagaa gtggatctca
 480
 ctcaccaact tcacagcga agccacagtg gagaagctac agcccagaa tcgacagatc
 540
 tgtgcctttt ccgatgtgct acctgtgctc tccatgaagc acaccaagga ccgcgtgggg
 600
 cagaatctac ccgctgtgg cattgagtgc aaaagctacc aagagggcct ggcccggcta
 660
 ccagagatga agcccagagc cgggacagag atccgcttct cagagctgcc cacgcagatg
 720
 ttcccagagg gtgccacgcc agctgagata accaagcaca gcatggacct gagctatgcc
 780
 ctggagactg tgctcatcaa gcagttcccc agcagcccc aggatgtgct tgggaaactc
 840
 cagtttgctt ttgtgtgctt cctgctgggg aatgtgtacg aggcatttga gcattggaag
 900
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 960
 atcaacctca tgtccatcct gtaccaccag cttggtgaga tcccgcgtga cttcttcgta
 1020
 gacattgtct cccaagacaa ctccctcacc agcaccttac aggttttctt ttccctctgcc
 1080
 tgcagcattg ccgtggatgc caccctgaga aagaaagctg aaaagttcca agctcacctg
 1140
 accaagaagt tccggtggga ctttgctgcg gaacctgagg actgtgcccc ggtggtggtg
 1200
 gagctccctg agggcatcga gatgggctaa ctcggggagc gctctcagct gcgaggggccc
 1260
 ccttcccaca gggctgcagt cctggcctct ccatttactt cttcccatcc tgggacctgc
 1320

cagggcagca atctctccag gtcttgcaaa gatggagcca gaattccctt tttcactgat
 1380
 aaatatattt cttcattgcc aaagaggctg taccatcctt gaaggcacat ttgtgggttc
 1440
 cccatcagcc aggccttggt gctaacctgg ctgaatttca cacaggctct tacacacaca
 1500
 cgctcctagg agacatctgc ctacacggca accatatttc ctctgaatga gaaggaattg
 1560
 aacccaaaagt ccaagaaaga actgattggt tgttccatag gagcttagga aacaagaaac
 1620
 cctggattgc ccaggggggtc tgagaagttg gttggtgact ttttttgcgg ttaaataaag
 1680
 ggtgatgggg agatcagccc gaattgccgc ctgcctcttg ctaaataagga gcagaggact
 1740
 tggcctgcag ctctctggga gcccttgatt gggaagagag tttcaaggga ggcagctgga
 1800
 ttcaatctag cagggtggtca gcttcagctt tctccatcga aatcccatc tctgttccag
 1860
 aggcccagtg ggtcatctcc caagggtgggt gtggaccctg gcctcagagg ccttgctggt
 1920
 gctgtcacct ccacctggt ccattccgag gcctcaccca gaagtgggac cctccccctc
 1980
 ctcaccagag ccaccgtgac tgtttctgat gacctggaga gtcaacaaca accagaaagg
 2040
 tttctgcccc gagcaggctt ctttaaggct ttacgaagtt ttgtgccttc caagtgtgta
 2100
 agaagacctg gtcagcctaa atcttcccag tcccgctgtg gagctgtcag tcaccggagt
 2160
 aatgagctcc tggttcctcg ggagtccttc gtgctgtgtg gcaggggttc tctctagaca
 2220
 agtacacagg ccctgccacc ctgacatcaa actggtgtac tatgatcaca gtcctgtgac
 2280
 catccttttc caagactggg gctcacacca tgtttttgaa tgagaatccc tgctgggtga
 2340
 gacttttgct tccacttggt tccttggaaga tgtttttcca agagcataat gtacattaaa
 2400
 gtcttcgagt tgagacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2460
 aaaaaaaaaa
 2469

<210> 3652

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3652

Met	Ala	Ala	Val	Gln	Met	Asp	Pro	Glu	Leu	Ala	Lys	Arg	Leu	Phe	Phe
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Glu	Gly	Ala	Thr	Val	Val	Ile	Leu	Asn	Met	Pro	Lys	Gly	Thr	Glu	Phe
			20				25					30			
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
		35				40				45					
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

50						55						60					
Lys	Ala	Asn	Pro	Lys	Glu	Val	Gly	Pro	Arg	Met	Gly	Phe	Phe	Leu	Ser		
65					70					75					80		
Leu	His	Gln	Arg	Gly	Leu	Thr	Val	Leu	Arg	Trp	Ser	Thr	Leu	Arg	Glu		
				85					90					95			
Glu	Val	Asp	Leu	Ser	Pro	Ala	Pro	Glu	Ser	Glu	Val	Glu	Ala	Met	Arg		
			100					105					110				
Ala	Asn	Leu	Gln	Glu	Leu	Asp	Gln	Phe	Leu	Gly	Pro	Tyr	Pro	Tyr	Ala		
	115						120					125					
Thr	Leu	Lys	Lys	Trp	Ile	Ser	Leu	Thr	Asn	Phe	Ile	Ser	Glu	Ala	Thr		
	130					135					140						
Val	Glu	Lys	Leu	Gln	Pro	Glu	Asn	Arg	Gln	Ile	Cys	Ala	Phe	Ser	Asp		
145					150					155					160		
Val	Leu	Pro	Val	Leu	Ser	Met	Lys	His	Thr	Lys	Asp	Arg	Val	Gly	Gln		
				165					170					175			
Asn	Leu	Pro	Arg	Cys	Gly	Ile	Glu	Cys	Lys	Ser	Tyr	Gln	Glu	Gly	Leu		
			180					185					190				
Ala	Arg	Leu	Pro	Glu	Met	Lys	Pro	Arg	Ala	Gly	Thr	Glu	Ile	Arg	Phe		
	195						200					205					
Ser	Glu	Leu	Pro	Thr	Gln	Met	Phe	Pro	Glu	Gly	Ala	Thr	Pro	Ala	Glu		
	210					215					220						
Ile	Thr	Lys	His	Ser	Met	Asp	Leu	Ser	Tyr	Ala	Leu	Glu	Thr	Val	Leu		
225					230					235					240		
Ile	Lys	Gln	Phe	Pro	Ser	Ser	Pro	Gln	Asp	Val	Leu	Gly	Glu	Leu	Gln		
				245					250					255			
Phe	Ala	Phe	Val	Cys	Phe	Leu	Leu	Gly	Asn	Val	Tyr	Glu	Ala	Phe	Glu		
			260					265					270				
His	Trp	Lys	Arg	Leu	Leu	His	Leu	Leu	Cys	Arg	Ser	Glu	Ala	Ala	Met		
	275						280					285					
Met	Lys	His	His	Thr	Leu	Tyr	Ile	Asn	Leu	Met	Ser	Ile	Leu	Tyr	His		
	290					295					300						
Gln	Leu	Gly	Glu	Ile	Pro	Ala	Asp	Phe	Phe	Val	Asp	Ile	Val	Ser	Gln		
305					310					315					320		
Asp	Asn	Phe	Leu	Thr	Ser	Thr	Leu	Gln	Val	Phe	Phe	Ser	Ser	Ala	Cys		
				325					330					335			
Ser	Ile	Ala	Val	Asp	Ala	Thr	Leu	Arg	Lys	Lys	Ala	Glu	Lys	Phe	Gln		
			340					345					350				
Ala	His	Leu	Thr	Lys	Lys	Phe	Arg	Trp	Asp	Phe	Ala	Ala	Glu	Pro	Glu		
	355						360					365					
Asp	Cys	Ala	Pro	Val	Val	Val	Glu	Leu	Pro	Glu	Gly	Ile	Glu	Met	Gly		
	370					375					380						

<210> 3653

<211> 283

<212> DNA

<213> Homo sapiens

<400> 3653

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120

tcttctccac tggagatgct ccttcagctc agcaggacgc tagctcgga ctcagactgc
180

acattttttgc ggattgggag gagggccgac gccgtggccg gatagtctct ggagctgcct
240
tttgggggtg tttgcctgtt ggcattttca gtactccacg cgt
283

<210> 3654

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3654

Met	Pro	Gln	Ala	Ser	Pro	Gly	Ala	Trp	Arg	His	Trp	Arg	Lys	Cys	Ile
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Ile	Pro	Ile	Arg	Ala	Ser	Phe	Ala	Ala	Glu	Met	Glu	Arg	Cys	His	
			20					25				30			
Gln	Ala	Val	Phe	Ser	Thr	Gly	Asp	Ala	Pro	Ser	Ala	Gln	Gln	Asp	Ala
		35					40					45			
Ser	Ser	Glu	Leu	Arg	Leu	His	Ile	Phe	Ala	Asp	Trp	Glu	Glu	Gly	Arg
	50					55				60					
Arg	Arg	Gly	Arg	Ile	Val	Ser	Gly	Ala	Ala	Phe	Trp	Gly	Cys	Leu	Pro
65					70					75				80	
Val	Gly	Ile	Phe	Ser	Thr	Pro	Arg								
					85										

<210> 3655

<211> 3477

<212> DNA

<213> Homo sapiens

<400> 3655

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120
gagtgaagagg ttgctctggg gcagctggag gaagaacagg gaacctaggg ttggggagag
180
atgtatagag gaaaactccc ccaggcacac agcctccgct ctggaccaac gcaggcttca
240
gtgagtacac acaaaggaac tgatgtcaag gccctttcta tgacccttcc cattctagca
300
agacctccca cccagtcac cttgggatct acagccacat gaaatacaga cacatcgttc
360
cccgaagtca ggccagtttt aggccattga gttatgggga aatgattaat gggatgaatg
420
aaaaacaaat aaaataaata aataaataaa tacactaaag ccttattagc caggcgtgat
480
cacatgcca aactccccct ccatcccagc actatgcaca gttcacggct catatgcaaa
540
gtggaagaca cgtgggacaa gagcaaagca caagtgcac atgggtccctc tetaacacct
600
cagcacacca accctgacgc tcccatcaca gatgctgatc attcttcac ggacccccctt
660
ttataataat cctcattcac atttctagtt tctgaggga gagagaaaga gaaaggaaga
720

agtggaaagt gcggaacccc aatgagtagg gcacagaaag gagggcgagc agagacagca
780
agaggtcagg taagccaagg agcagcggag caggtcaatc agggaagttc tgggcaccct
840
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<210> 3656

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
			20					25					30		
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40				45				
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50				55						60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

65					70					75					80
Glu	Gln	Glu	Lys	Ile	Asp	Lys	Leu	Met	Ile	Glu	Met	Asp	Gly	Thr	Glu
				85					90					95	
Asn	Lys	Ser	Lys	Phe	Gly	Ala	Asn	Ala	Ile	Leu	Gly	Val	Ser	Leu	Ala
			100					105					110		
Val	Cys	Lys	Ala	Gly	Ala	Val	Glu	Lys	Gly	Val	Pro	Leu	Tyr	Arg	His
		115					120					125			
Ile	Ala	Asp	Leu	Ala	Gly	Asn	Ser	Glu	Val	Ile	Leu	Pro	Val	Pro	Ala
	130					135					140				
Phe	Asn	Val	Ile	Asn	Gly	Gly	Ser	His	Ala	Gly	Asn	Lys	Leu	Ala	Met
145					150					155					160
Gln	Glu	Phe	Met	Ile	Leu	Pro	Val	Gly	Ala	Ala	Asn	Phe	Arg	Glu	Ala
			165						170					175	
Met	Arg	Ile	Gly	Ala	Glu	Val	Tyr	His	Asn	Leu	Lys	Asn	Val	Ile	Lys
		180						185					190		
Glu	Lys	Tyr	Gly	Lys	Asp	Ala	Thr	Asn	Val	Gly	Asp	Glu	Gly	Gly	Phe
		195					200					205			
Ala	Pro	Asn	Ile	Leu	Glu	Asn	Lys	Glu	Gly	Leu	Glu	Leu	Leu	Lys	Thr
	210					215					220				
Ala	Ile	Gly	Lys	Ala	Gly	Tyr	Thr	Asp	Lys	Val	Val	Ile	Gly	Met	Asp
225					230					235					240
Val	Ala	Ala	Ser	Glu	Phe	Phe	Arg	Ser	Gly	Lys	Tyr	Asp	Leu	Asp	Phe
			245						250				255		
Lys	Ser	Pro	Asp	Asp	Pro	Ser	Arg	Tyr	Ile	Ser	Pro	Asp	Gln	Leu	Ala
		260						265					270		
Asp	Leu	Tyr	Lys	Ser	Phe	Ile	Lys	Asp	Tyr	Pro	Val	Val	Ser	Ile	Glu
	275						280					285			
Asp	Pro	Phe	Asp	Gln	Asp	Asp	Trp	Gly	Ala	Trp	Gln	Lys	Phe	Thr	Ala
290					295						300				
Ser	Ala	Gly	Ile	Gln	Val	Val	Gly	Asp	Asp	Leu	Thr	Val	Thr	Asn	Pro
305				310						315					320
Lys	Arg	Ile	Ala	Gln	Ala	Val	Asn	Glu	Lys	Ser	Cys	Asn	Cys	Leu	Leu
			325						330					335	
Leu	Lys	Val	Asn	Gln	Ile	Gly	Ser	Val	Thr	Glu	Ser	Leu	Gln	Ala	Cys
		340						345					350		
Lys	Leu	Ala	Gln	Ala	Asn	Gly	Trp	Gly	Val	Met	Val	Ser	His	Arg	Ser
	355					360						365			
Gly	Glu	Thr	Glu	Asp	Thr	Phe	Ile	Ala	Asp	Leu	Val	Val	Gly	Leu	Cys
	370					375					380				
Thr	Gly	Gln	Ile	Lys	Thr	Gly	Ala	Pro	Cys	Arg	Ser	Glu	Arg	Leu	Ala
385					390					395					400
Lys	Tyr	Asn	Gln	Leu	Leu	Arg	Ile	Glu	Glu	Glu	Leu	Gly	Ser	Lys	Ala
			405						410					415	
Lys	Phe	Ala	Gly	Arg	Asn	Phe	Arg	Asn	Pro	Leu	Ala	Lys			
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<210> 3657

<211> 337

<212> DNA

<213> Homo sapiens

<400> 3657

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 240
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<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
			20					25					30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40					45				
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
	50					55				60					
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65				70					75					80	
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
			85					90						95	

Arg Thr Arg

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 180
 gatattaaac acaatgagga acttcttaaa aggtgccaac tacattataa agaactaaag
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 360
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 420
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 480

gaccactta aggatgaatt aaaccttgct gattctgaag tggataacca aaaacgaggg
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 660
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 720
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 780
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<210> 3660

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3660

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			20					25					30		
Glu	Ile	Ser	Asp	Leu	Glu	Asn	Glu	Val	Glu	Asn	Lys	Thr	Ala	Gln	Ile
		35					40					45			
Leu	Asn	Leu	Gln	Gln	His	Leu	Ser	Ala	Leu	Glu	Lys	Asp	Ile	Lys	His
	50					55					60				
Asn	Glu	Glu	Leu	Leu	Lys	Arg	Cys	Gln	Leu	His	Tyr	Lys	Glu	Leu	Lys
65					70					75				80	
Met	Lys	Ile	Arg	Lys	Asn	Ile	Ser	Glu	Ile	Arg	Glu	Leu	Glu	Asn	Ile
			85					90						95	
Glu	Glu	His	Gln	Ser	Val	Asp	Ile	Ala	Thr	Leu	Glu	Asp	Glu	Ala	Gln
			100					105					110		
Glu	Asn	Lys	Ser	Lys	Met	Lys	Met	Val	Glu	Glu	His	Met	Glu	Gln	Gln
	115					120						125			
Lys	Glu	Asn	Met	Glu	His	Leu	Lys	Ser	Leu	Lys	Ile	Glu	Ala	Glu	Asn
	130					135					140				
Lys	Tyr	Asp	Ala	Ile	Lys	Phe	Lys	Ile	Asn	Gln	Leu	Ser	Glu	Leu	Ala
145					150					155					160
Asp	Pro	Leu	Lys	Asp	Glu	Leu	Asn	Leu	Ala	Asp	Ser	Glu	Val	Asp	Asn
			165					170						175	
Gln	Lys	Arg	Gly	Lys	Arg	His	Tyr	Glu	Lys	Lys	Gln	Lys	Glu	His	Leu
		180						185					190		
Asp	Thr	Leu	Asn	Lys	Lys	Lys	Arg	Glu	Leu	Asp	Met	Lys	Glu	Lys	Glu
	195						200					205			
Leu	Glu	Glu	Lys	Met	Ser	Gln	Ala	Arg	Gln	Ile	Cys	Pro	Glu	Arg	Ile

210	215	220
Glu Val Glu Lys Ser Ala Ser Ile Leu Asp Lys Glu Ile Asn Arg Leu		
225	230	235
Arg Gln Lys Ile Gln Ala Glu His Ala Ser His Gly Asp Arg Glu Glu		240
	245	250
Ile Met Arg Gln Tyr Gln Glu Ala Arg Glu Thr Tyr Leu Asp Leu Asp		255
	260	265
Ser Lys Val Arg Thr Leu Lys Lys Phe Ile Lys Leu Leu Gly Glu Ile		270
	275	280
Met Glu His Arg Phe Lys Thr Tyr Gln Gln Phe Arg Arg Cys Leu Thr		285
	290	295
Leu Arg Cys Lys Leu Tyr Phe Asp Asn Leu Leu Ser Gln Arg Ala Tyr		300
305	310	315
Cys Gly Lys Met Asn Phe Asp His Lys Asn Glu Thr Leu Ser Ile Ser		320
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Val Gln Pro Gly Glu		335
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<210> 3661

<211> 1117

<212> DNA

<213> Homo sapiens

<400> 3661

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720
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900

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 1020
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<210> 3662

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

Met	Thr	Tyr	Tyr	Ile	Leu	Lys	Asn	His	Gln	Lys	Ser	Phe	His	Ala	Ile
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Asp	His	Arg	Leu	Ser	Ile	Ser	Lys	Lys	Thr	Ala	Asn	Gly	Gly	Leu	Lys
			20					25					30		
Pro	Ser	Val	Tyr	Pro	Tyr	Lys	Leu	Tyr	Arg	Leu	Leu	Pro	Met	Lys	Cys
			35				40					45			
Lys	Arg	Ala	Pro	Tyr	Lys	Ser	Tyr	Arg	Asn	Ser	Ser	Tyr	Glu	Asn	Ala
	50				55					60					
Arg	Glu	Asn	Ser	Gln	Met	Asn	Glu	Ser	Ala	Pro	Gly	Thr	Tyr	Val	Val
65				70					75					80	
Gln	Asn	Pro	His	Ser	Ser	Glu	Leu	Pro	Thr	Leu	Asn	Phe	Gln	Asp	Thr
			85					90					95		
Val	Asn	Thr	Leu	Thr	Asn	Ser	Pro	Ala	Ile	Pro	Leu	Glu	Thr	Ser	Ala
			100					105					110		
Cys	Gln	Asp	Ile	Pro	Thr	Ser	Ala	Asn	Val	Gln	Asn	Ala	Glu	Gly	Thr
	115						120					125			
Lys	Trp	Gly	Glu	Glu	Ala	Leu	Lys	Met	Asp	Leu	Asp	Asn	Asn	Phe	Tyr
	130					135				140					
Ser	Thr	Glu	Val	Ser	Val	Ser	Ser	Thr	Glu	Asn	Ala	Val	Ser	Ser	Asp
145					150					155					160
Leu	Arg	Ala	Gly	Asp	Val	Pro	Val	Leu	Ser	Leu	Ser	Asn	Ser	Ser	Glu
			165					170					175		
Asn	Ala	Ala	Ser	Val	Ile	Ser	Tyr	Ser	Gly	Ser	Ala	Pro	Ser	Val	Ile
		180						185					190		
Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile
	195						200					205			
Ala	Ala	Met	Thr	Ser	Ser	Asn	His	Arg	Ala	Phe	Ser	Asp	Pro	Ala	Val
	210					215				220					
Ser	Gln	Ser	Leu	Lys	Asp	Asp	Ser	Lys	Pro	Glu	Pro	Asp	Lys	Val	Gly
225				230						235				240	
Arg	Phe	Ala	Ser	Arg	Pro	Lys	Ser	Ile	Lys	Glu	Lys	Lys	Lys	Thr	Thr
			245					250						255	
Ser	His	Thr	Arg	Gly	Glu	Ile	Pro	Glu	Glu	Ser	Asn	Tyr	Val	Ala	Asp
		260					265						270		
Pro	Gly	Gly	Ser	Leu	Ser	Lys	Thr	Thr	Asn	Ile	Ala	Glu	Glu	Thr	Ser
	275						280					285			
Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr
	290					295				300					
Asn	Ser	Asn	Val	Ala	Pro	Leu	Cys	Gln	Ile	Thr	Val	Lys	Ile	Gly	Asn

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305          310          315          320
Glu Ala Ile Val Lys Arg His Ile Leu Gly Ser Lys Leu Phe Tyr Lys
          325          330          335
Arg Gly Arg Arg Pro Lys Tyr Gln Met Gln Glu Glu Leu Leu Pro Gln
          340          345          350
Gly Asn Asp Pro Glu Pro Ser Gly Asp Ser Pro Leu Gly Leu Cys Gln
          355          360          365
Ser Glu Cys
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<210> 3663
<211> 481
<212> DNA
<213> Homo sapiens

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<400> 3663
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180
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360
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480
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481

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<210> 3664
<211> 138
<212> PRT
<213> Homo sapiens

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<400> 3664
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Arg Asp Met Gln Leu Ile Ala Leu Glu Gln Leu Cys Met Leu Leu Leu
20          25          30
Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr
35          40          45
Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp
50          55          60
Asn Val Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val
65          70          75          80
Ser Ala Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys
85          90          95
Ala Leu Cys Asn Arg Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser

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<210> 3665
<211> 6633
<212> DNA
<213> Homo sapiens
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2815

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1380
agcctgcaga tggaagctta cgagaggagg attcggaggc tggaacagga gaagctggag
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ctgagcagga agctgcaaga gtccacccag accgtgcagt ccctccacgg ctcatctcgg
1500
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1560
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1620
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aagatggata cttctgggtt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
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420
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480
gttccaactg agcttgcgac tcacttgaag gagactcagc caggattgct tgtggcttca
540
gtcctgggat tgcagaagaa cagcaaaatt gggattgaag aagcagattc tttctttaag
600
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cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gcgaacatcg
780
gaggatctga taaatgcctg tagtcattat ggcttaattt atccatgggt tcacgtcgta
840

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atatcatctg attctttagc tgataaaaat tatacagaag atctttcaaa attacagtct
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 960
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 1020
 gaacagtgcg tagacatact gttagagaga tgcccggagg cagtcattcc atatgcta
 1080
 catgaactga aagaagagaa ccggactctg tgggtggaaaa aactgttgcc tgaactttgt
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 1226

<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

Met	Ser	Gly	Leu	Ser	Met	Ala	Glu	Val	Leu	Ala	Arg	Thr	Asp	Trp	Thr
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Val	Glu	Asp	Gly	Leu	Gln	Lys	Tyr	Glu	Arg	Gly	Leu	Ile	Phe	Tyr	Ile
			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
		35					40					45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
	50					55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65					70					75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
				85					90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
		115				120					125				
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
	130					135					140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155				160	
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165					170						175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
			180					185					190		
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
	195					200						205			
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
	210					215					220				
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245					250						255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

<210> 3672

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3672

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Met Ser Glu Cys Pro Leu Ile Leu Tyr Ile His Lys His Ile Asp Thr
 1           5           10           15
Tyr Ser Gln Ser Tyr Leu Phe Asn Asp Leu Phe Tyr Pro Val Tyr Ser
      20           25           30
Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly
      35           40           45
Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
      50           55           60
Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
65           70           75           80
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
      85           90           95
Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
      100          105          110
Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
      115          120

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<210> 3673

<211> 1052

<212> DNA

<213> Homo sapiens

<400> 3673

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180
aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgcttt cgcaagttcc
240
acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta
300
gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa
360
gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt
420
ttgcataccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca
480
ttaaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aataccctg
540
gattgctgtc gccttggtta atatgatgag tttcatgatt atctagaacg gtcatatgaa
600
ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt
660
gatctgctgt tggagacgag aaagcctgat caggttttcc aatcttataa acctggaggg
720
gagccatttt acaccatttt tagttgggtct gtacttagaa ttttcctgag aaagggtttt
780

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tttttattgt agcaatgaac ataatttaca ttttgtatat ggtcttaca tgtagaataa
 840
 ttttgacagg ttgagaagta ctcagcacca gcttggaatt aagttctaga ttacttgcaa
 900
 agagttgtgt acataatttt aaaaacaaca aaaaacaaca aagcttctag cttacgggtc
 960
 tcagtgggtt ttttcttctc cagtgggctg tactgaatca ttctggatgc tgtcaatccc
 1020
 taaagttatc aattgctctc ttaggaagat ct
 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

Xaa	Ile	Ser	Lys	Ser	Gly	Leu	Glu	Lys	Asn	Ser	Leu	Ile	Tyr	Glu	Leu	1	5	10	15
Phe	Ser	Val	Met	Val	His	Ser	Gly	Ser	Ala	Ala	Gly	Gly	His	Tyr	Tyr	20	25	30	
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp	35	40	45	
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly	50	55	60	
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser	65	70	75	80
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn	85	90	95	
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu	100	105	110	
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu		115	120	125	
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr	130	135	140	
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr	145	150	155	160
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu	165	170	175	
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His	180	185	190	
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly	195	200	205	
Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	Leu		210	215	220	
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly	225	230	235	240
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu	245	250	255	
Arg	Lys	Val	Phe	Phe	Leu	Leu										260			

<210> 3675

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3675

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120
gacagctata ttgtgcgtgt caaggctgtg gttatgacca gagatgactc cagcggggga
180
tggttcccac aggaaggagg cgggatcagt cgcgtcgggg tctgtaaggt catgcacccc
240
gaaggcaatg gacgaagcgg ctttctcatc catggtgaac gacagaaaga caaactggtg
300
gtattggaat gctatgtaag aaaggacttg gtctacacca aagccaatcc aacgtttcat
360
cactggaagg tcgataatag gaagtttgga cttactttcc aaagccctgc tgatgccga
420
gcctttgaca ggggagtaag gaaagcaatc gaagacctta tagaagaagt agaaaatgat
480
tctggcgggc ccagaaggct cctggcctac ccactgtcct cctgtaatca gaggcccagg
540
gtgtacagct gccactgaaa aggaaaggga tctgtgacct ctggagccct ggttcggttt
600
aggccttggt ctatgggtaa gtgagtagta ggcattgtgt tacatctgat cgtggcctgg
660
agggcccttg ggcagtcagt tctcatggtg ggcttgacta gagtccacag atgcaaacac
720
aaaaattctc cactgcagca catccaggta tcaaatacaga gggttaaaga agccatagac
780
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837

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<210> 3676

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3676

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Met Thr Glu Glu Thr His Pro Asp Asp Asp Ser Tyr Ile Val Arg Val
1      5      10      15
Lys Ala Val Val Met Thr Arg Asp Asp Ser Ser Gly Gly Trp Phe Pro
20     25     30
Gln Glu Gly Gly Gly Ile Ser Arg Val Gly Val Cys Lys Val Met His
35     40     45
Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
50     55     60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
65     70     75     80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
85     90     95
Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
100    105    110
Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

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          115              120              125
Asp Ser Gly Gly Pro Arg Arg Leu Leu Ala Tyr Pro Leu Ser Ser Cys
      130              135              140
Asn Gln Arg Pro Arg Val Tyr Ser Cys His
145              150

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<210> 3677
 <211> 418
 <212> DNA
 <213> Homo sapiens

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<400> 3677
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120
tgccgaaaga gcatggagga agatgaaagg cagacaggtc gagaacatgc agtggcgatc
180
tccttgtcac acacatcctg caaatcacag tcttgtggag atgactctca ttcgtcctcg
240
tcttctctct catcctctc atcctcgtcc tctcttctct gccctgggaa ctcgggagac
300
tgggatccta gctcgttctc gtcggcacat aagctctcgg gcctctggaa ttccccacat
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tccagtgggg ccattgccagg cagctctctt gggagtctct ctaccatccc tggcgcgc
418

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<210> 3678
 <211> 139
 <212> PRT
 <213> Homo sapiens

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<400> 3678
Xaa Glu Glu Gly Pro Ser Gln Asn Gly Leu Val Leu Gln Gly Glu Lys
 1          5          10          15
Leu Pro Pro Asp Phe Met Pro Lys Leu Val Lys Asn Leu Leu Gly Glu
      20          25          30
Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp
      35          40          45
Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His
      50          55          60
Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser
65          70          75          80
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly
      85          90          95
Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu
      100         105         110
Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser
      115         120         125
Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala
      130         135

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<210> 3679
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3679

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 120
 gagatcgag agatcaaggc ccagctggag acagccctga agtggaggaa ctatgagggtg
 180
 aagctgctggc tgctgctgca cctggaggaa ctgcagatgg agcatgatat ccggcactat
 240
 gacctggagt cgggtgcccac gacctgggac cctgtggacc agaaccaccag gctgctcacg
 300
 ctggagggttc ctggagtgc tgagagccgc ccctcagtgc tacggggcgga ccacctgttt
 360
 gcccttttgt cctcggagac acaccaggag gaccccatca catataaggg ctttgtgcac
 420
 aagggtggaat tggaccgtgt caagctgagc ttttccatga gcctcctgag ccgctttgtg
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 gatgggctga ccttcaaggt gaactttacc ttcaaccgcc agccgctgcg agtccagcac
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<210> 3680

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3680

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Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly
			20					25					30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
			35					40					45		
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
			50					55				60			
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
							70				75				80
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
							85				90			95	
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
							100				105			110	
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
							115				120			125	
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
							130				135			140	
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val
							145				150			155	160
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
							165				170			175	
Arg	Val	Gln	His	Arg	Ala	Trp	Glu	Leu	Thr	Gly	Arg	Trp			

180

185

<210> 3681
 <211> 788
 <212> DNA
 <213> Homo sapiens

<400> 3681
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 120
 gagaccggga ggcagagctt cagcagctgc gggacagcct ggggctgagc atggagcagc
 180
 gcggcggagg tcgcctgcga ggccgctggc caggcctgag cctctgccac catggccatt
 240
 gtgcagactc tgccagtgcc actggagcct gctcctgaag ctgccactgc cccacaagct
 300
 ccagtcatgg gtagtgtgag cagccttata tcaggccggc cctgtcccgg ggggcccagct
 360
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 420
 cggggtggct atgaggcaca ggagccgctg tgcccagctg tgccccctag gaaggctgtc
 480
 cctgtcacca gcttcaccta catcaatgag gacttccgga cagagtcacc cccagcccca
 540
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 600
 ccaccaaagc tcatccctgt ctctggaaag ctggagaaga acatagagaa gatcctgatc
 660
 cgcccaacag ccttcaagcc agtgctgccc aaacctcgag gggctccgtc cctgcctagc
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 gggggccc
 788

<210> 3682
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 3682
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 Ala Ala Thr Ala Pro Gln Ala Pro Val Met Gly Ser Val Ser Ser Leu
 20 25 30
 Ile Ser Gly Arg Pro Cys Pro Gly Gly Pro Ala Pro Pro Arg His His
 35 40 45
 Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg
 50 55 60
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg
 65 70 75 80
 Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn Glu Asp Phe Arg

				85				90				95			
Thr	Glu	Ser	Pro	Pro	Ser	Pro	Ser	Ser	Asp	Val	Glu	Asp	Ala	Arg	Glu
				100				105				110			
Gln	Arg	Ala	His	Asn	Ala	His	Leu	Arg	Gly	Pro	Pro	Pro	Lys	Leu	Ile
				115				120				125			
Pro	Val	Ser	Gly	Lys	Leu	Glu	Lys	Asn	Ile	Glu	Lys	Ile	Leu	Ile	Arg
				130				135				140			
Pro	Thr	Ala	Phe	Lys	Pro	Val	Leu	Pro	Lys	Pro	Arg	Gly	Ala	Pro	Ser
				145				150				155			
Leu	Pro	Ser	Phe	Met	Gly	Pro	Arg	Ala	Thr	Gly	Leu	Ser	Gly	Ser	Gln
				165				170				175			
Gly	Ser	Leu	Thr	Gln	Leu	Phe	Gly	Gly							
				180				185							

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<210> 3683
<211> 4421
<212> DNA
<213> Homo sapiens
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120					
cgaggggtgaa	gcccgcgggc	ccgcgaactg	gactgggtgga	tctctcagac	ctggggcccc
180					
ggactccgat	ctccgcgctc	tccgccacca	tcagggcggg	atccggctct	ggtgttttga
240					
ggaggggggtg	tgggtgtaggg	aaaggaatcc	cgcccccttc	cacctttttt	cgccttcggg
300					
gcttcagact	caggggaactc	gctcatggct	ttcttgatga	agaagaagaa	attcaaattc
360					
caaactactt	tcaccttgga	ggagctgact	gcggttcctt	tcgtagaacg	ggtcctcttc
420					
tgcaagggtcc	ggctgctgga	tggaggggat	tttgtcagct	tgtcgtcaag	ggaggaggta
480					
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540					
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600					
ggcgggaagg	cttattccaa	gctgggcttc	gctgacttga	acctggccga	gtttgcgggc
660					
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720					
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780					
aagacgccac	catcgactgc	caagtccatc	tccatcccag	gccaggattc	ctccctgcag
840					
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900					
ttccggcccc	ccaaggctcg	gcccactatt	ctcagctcag	ggctgccaga	ggaacccgac
960					
cagaacctgt	ccagccctga	ggaggtgttc	cactctggcc	actcccgcaa	ctccagctat
1020					

gccagccagc agtccaagat ctccggctac agcacagagc actcgcactc ctccagcctc
1080
tcagacctga cgcaccgccc caacacgtcc accagcagca gcgcctctgg gggccttggc
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1200
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1260
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1320
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<211> 384

<212> PRT

<213> Homo sapiens

<400> 3684

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<210> 3685

<211> 1293

<212> DNA

<213> Homo sapiens

<400> 3685

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<210> 3686
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 Arg Val Pro Cys Leu Cys Pro Pro Arg Arg Arg His Pro Pro Arg Ser
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 Phe Thr Ser Cys Thr Phe Ser Gly Ser Arg Ser His Ile His Pro Thr
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<210> 3687
 <211> 566
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<210> 3688

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<212> PRT

<213> Homo sapiens

<400> 3690

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Arg	Ser	Gly	Arg	Ala	Thr	Asn	His	Asp	Ser	Cys	Asp	Ser	Cys	Lys	Glu
	50				55						60				
Gly	Gly	Asp	Leu	Leu	Cys	Cys	Asp	His	Cys	Pro	Ala	Ala	Phe	His	Leu
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Gln	Cys	Cys	Asn	Pro	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu
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Trp	Met	Cys	His	Arg	Cys	Thr	Val	Arg	Arg	Lys	Lys	Arg	Glu	Gln	Lys
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	260		265	270
Val Cys Phe Thr Cys Asn Arg Ser Cys Arg Val Ala Pro Leu Ile Gln				
	275		280	285
Cys Asp Tyr Cys Pro Leu Leu Phe His Met Asp Cys Leu Glu Pro Pro				
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Leu Thr Ala Met Pro Leu Gly Arg Trp Met Cys Pro Asn His Ile Glu				
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Asp Phe Leu Asn Arg Ile His Lys Lys His Pro Pro Asn Arg Arg Val				
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Leu Gln Ser Val Lys Arg Arg Ser Leu Lys Val Pro Asp Ala Ile Lys				
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Leu Cys Ser Val Val Ala Leu Gln Cys Ser Ile Leu Lys His Leu Ser				
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Ala Lys Gln Met Pro Ser His Trp Asp Ser Glu Gln Thr Glu Lys Ala				
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<210> 3691

<211> 418

<212> DNA

<213> Homo sapiens

<400> 3691

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300

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<211> 94

<212> PRT

<213> Homo sapiens

<400> 3692

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			20					25					30		
Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Phe	Tyr	Val	Leu	Arg	Gln
			35				40					45			
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Cys	Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro
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<210> 3693

<211> 2641

<212> DNA

<213> Homo sapiens

<400> 3693

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<211> 390

<212> PRT

<213> Homo sapiens

<400> 3694

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<212> DNA
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<211> 146

<212> PRT

<213> Homo sapiens

<400> 3696

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Tyr	Phe	Ala	Glu	Tyr	Trp	Tyr	Gln	Ala	Gln	Cys	Cys	Gln	Tyr	Asp	Tyr
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Cys	Asn	Ser	Trp	Ser	Ser	Pro	Gln	Leu	Gln	Ser	Ser	Leu	Pro	Glu	Pro
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His	Asp	Arg	Pro	Leu	Ala	Leu	Pro	Leu	Ser	Asp	Ser	Gln	Ile	Gln	Trp
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Phe	Tyr	Gln	Ala	Leu	Asn	Leu	Ser	Leu	Pro	Leu	Pro	Asn	Phe	His	Ala
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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		35					40					45			
Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro	Gly
	50					55					60				
Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Asp	Leu	Asn	Glu	Cys	Gly	Leu	Lys
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Pro	Arg	Pro	Cys	Lys	His	Arg	Cys	Met	Asn	Thr	Tyr	Gly	Ser	Tyr	Lys
			85					90						95	
Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met	Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser
		100					105						110		
Ser	Ala	Leu	Thr	Cys	Ser	Met	Ala	Asn	Cys	Gln	Tyr	Gly	Cys	Asp	Val
	115						120					125			
Val	Lys	Gly	Gln	Ile	Arg	Cys	Gln	Cys	Pro	Ser	Pro	Gly	Leu	Gln	Leu
	130					135					140				
Ala	Pro	Asp	Gly	Arg	Thr	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Thr	Gly
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 50 55 60
 Asp Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser
 65 70 75 80
 Gly His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Glu Ser Val Leu
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			20					25					30		
Ser	Asn	Leu	Lys	Glu	His	Lys	Lys	Thr	His	Thr	Ala	Asp	Lys	Val	Phe
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Thr	Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Met	Gln	Arg	Lys	Leu	Val
	50					55					60				
Lys	His	Arg	Ile	Arg	His	Thr	Gly	Glu	Arg	Pro	Tyr	Ser	Cys	Ser	Ala
65					70				75						80
Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg
			85					90					95		
Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys
			100					105					110		
Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	Arg	His	Lys	Lys	Met	His	Cys	Lys
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Ala	Gly	Asp	Glu	Ser	Pro	Asp	Val	Leu	Glu	Glu	Leu	Ser	Gln	Ala	Ile
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<210> 3704

<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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Leu	His	Leu	Leu	Lys	Ser	Ser	Cys	Ala	Pro	Ser	Val	Gln	Met	Lys	Ile
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Lys	Glu	Leu	Tyr	Arg	Arg	Arg	Phe	Pro	Arg	Lys	Thr	Leu	Gly	Pro	Ser
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Pro	Val	His	Pro	Asp	Val	Thr	Met	Lys	Pro	Leu	Pro	Phe	Tyr	Glu	Val
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Tyr	Thr	Ile	Gln	Val	Gln	Leu	Arg	Phe	Cys	Leu	Cys	Glu	Thr	Ser	Cys
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Pro	Gln	Glu	Asp	Tyr	Phe	Pro	Pro	Asn	Leu	Phe	Val	Lys	Val	Asn	Gly
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Ala Gly Thr Leu Leu Gln Lys Leu Arg Ala Lys Gly Ile Arg Asn Pro
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Asp His Ser Arg Ala Leu Ile Lys Glu Lys Leu Thr Ala Asp Pro Asp
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Ser Glu Val Ala Thr Thr Ser Leu Arg Val Ser Leu Met Cys Pro Leu
305          310          315          320
Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr Cys Ala His
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Pro Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro Tyr Glu Ser
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Cys Asp Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys Pro Met Lys
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Pro Lys Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly Tyr Gly Leu
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Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro Ser Glu Asn
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Lys Lys Lys Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp
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Glu Glu Asp Leu Pro Pro Thr Lys Lys His Cys Ser Val Thr Ser Ala
          450          455          460
Ala Ile Pro Ala Leu Pro Gly Ser Lys Gly Val Leu Thr Ser Gly His
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Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Gly
          485          490          495
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Glu Ser Gln His Tyr Gly Pro Ser Val Ile Thr Ser Leu Asp Glu Gln
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Asp Ala Leu Gly His Phe Phe Gln Tyr Arg Gly Thr Pro Ser His Phe
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Leu Gly Pro Leu Ala Pro Thr Leu Gly Ser Ser His Cys Ser Ala Thr
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Pro Ala Pro Pro Pro Gly Arg Val Ser Ser Ile Val Ala Pro Gly Gly
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<210> 3705

<211> 1737

<212> DNA

<213> Homo sapiens

<400> 3705

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<210> 3706

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3706

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			20					25					30		
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Ala	Gly	Thr	Glu	Ala	Gly	Arg	Val	Gly	Gly	Val	Thr	Val	Glu	Gln	Gly
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Lys	Ser	Leu	Ile	Asn	Tyr	Glu	Pro	His	Gly	Thr	Arg	Thr	Ala	Gly	Phe
65				70					75					80	
Thr	Ala	His	Pro	Pro	Lys	Ser	Thr	Ser	Val	Cys	Val	Cys	Xaa	Arg	Gln
			85					90						95	
His	Ile	Cys	Thr	Cys	Val	Cys	Met	Cys	Val	Arg	Lys	Cys	Val	Pro	Arg
			100					105					110		
Gln	His	Ile	Cys	Met	Cys	Ala	Cys	Val	Cys	Ile	Arg	Thr	Ala	Ile	Cys
		115					120					125			
Thr	Cys	Val	His	Val	Gln	Thr	Ala	Tyr	Leu	Cys	Thr	Cys	Val	Cys	Pro
	130					135					140				
Gly	Asn	Ile	Cys	Thr	Cys	Val	Ser	Val	Glu	Ala	Ala	Leu	Ser	Val	Cys
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<210> 3707

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3707

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<210> 3708

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3708

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			20					25					30		
Glu	Asn	Ala	Phe	Asp	Asn	Ile	Gln	Leu	Pro	Tyr	Met	Ile	Lys	Thr	Leu
		35					40					45			
Lys	Lys	Leu	Gly	Ile	Glu	Gly	Met	Tyr	Leu	Asn	Val	Ile	Lys	Ala	Val
	50					55					60				
Tyr	Asp	Arg	Pro	Xaa	Val	Ser	Ile	Ile	Leu	Asn	Gly	Glu	Asn	Leu	Gln
65					70				75					80	
Glu	Leu	Gln	Thr	Phe	Gly	Leu	Arg	Ser	Gly	Thr	Gln	Gln	Gly	Cys	Pro
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Leu	Ser	Pro	Gln	Leu	Leu	Asn	Ile	Val	Leu						
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<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709

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<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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			20					25					30		
Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
		35					40					45			
Leu	Val	Leu	Ser	Ser	Val	Ser	Asp	Tyr	Phe	Ala	Ala	Met	Phe	Thr	Asn
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<210> 3711

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3711

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<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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			20					25					30		
Leu	Gly	Arg	Gly	Phe	Asn	Thr	Gly	Val	Ile	Leu	Leu	Arg	Leu	Asp	Arg
		35					40					45			
Leu	Arg	Gln	Ala	Gly	Trp	Glu	Gln	Met	Trp	Arg	Leu	Thr	Ala	Arg	Arg
	50					55					60				
Glu	Leu	Leu	Ser	Leu	Pro	Ala	Ala	Ser	Leu	Ala	Asp	Gln	Asp	Ile	Phe
65					70					75				80	
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				85					90					95	
Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr
		100						105					110		
Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys
		115					120					125			
Leu	Arg	Val	Lys	Asn	Lys	His	Val	Glu	Phe	Phe	Arg	Asn	Phe	Tyr	Leu
	130					135					140				
Thr	Phe	Leu	Glu	Tyr	Asp	Gly	Asn	Leu	Leu	Arg	Arg	Glu	Leu	Phe	Val
145					150					155					160
Cys	Pro	Ser	Gln	Pro	Pro	Pro	Gly	Ala	Glu	Gln	Leu	Gln	Gln	Ala	Leu
			165						170					175	
Ala	Gln	Leu	Asp	Glu	Glu	Asp	Pro	Cys	Phe	Glu	Phe	Arg	Gln	Gln	Gln
		180						185					190		
Leu	Thr	Val	His	Arg	Val	His	Val	Thr	Phe	Leu	Pro	His	Glu	Pro	Pro
	195						200					205			
Pro	Pro	Arg	Pro	His	Asp	Val	Thr	Leu	Val	Ala	Gln	Leu	Ser	Met	Asp
	210					215					220				
Arg	Leu	Gln	Met	Leu	Glu	Ala	Leu	Cys	Arg	His	Trp	Pro	Gly	Pro	Met

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225                230                235                240
Ser Leu Ala Leu Tyr Leu Thr Asp Ala Glu Ala Gln Gln Phe Leu His
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Phe Val Glu Ala Ser Pro Val Leu Ala Ala Arg Gln Asp Val Ala Tyr
                260                265                270
His Val Val Tyr Arg Glu Gly Pro Leu Tyr Pro Val Asn Gln Leu Arg
                275                280                285
Asn Val Ala Leu Ala Gln Ala Leu Thr Pro Tyr Val Phe Leu Ser Asp
                290                295                300
Ile Asp Phe Leu Pro Ala Tyr Ser Leu Tyr Asp Tyr Leu Arg Ala Ser
305                310                315                320
Ile Glu Gln Leu Gly Leu Gly Ser Arg Arg Lys Ala Ala Leu Val Val
                325                330                335
Pro Ala Phe Glu Thr Leu Arg Tyr Arg Phe Ser Phe Pro His Ser Lys
                340                345                350
Val Glu Leu Leu Ala Leu Leu Asp Ala Gly Thr Leu Tyr Thr Phe Arg
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<210> 3713

<211> 1719

<212> DNA

<213> Homo sapiens

<400> 3713

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240
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360
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420
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900

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 1080
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<210> 3714

<211> 488

<212> PRT

<213> Homo sapiens

<400> 3714

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Thr	Pro	Val	Gln	Asp	Glu	Arg	Asp	Ser	Gly	Ser	Asp	Gly	Glu	Asp	Asp
			20					25					30		
Val	Asn	Glu	Gln	His	Ser	Gly	Ser	Asp	Thr	Gly	Ser	Val	Glu	Arg	His
		35					40					45			
Ser	Glu	Asn	Glu	Thr	Ser	Asp	Arg	Glu	Asp	Gly	Pro	Pro	Lys	Gly	His
	50					55					60				
His	Val	Thr	Asp	Ser	Glu	Asn	Asp	Glu	Pro	Leu	Asn	Leu	Asn	Ala	Ser
65					70					75					80
Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
				85					90					95	
Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu	Asp
			100					105					110		
Val	Asn	Gln	His	Gly	Ser	Asp	Ser	Glu	Ser	Glu	Glu	Thr	Arg	Lys	Leu
		115					120					125			
Pro	Gly	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Leu	Leu	Asn	Gly	His	Ala	Ser
	130					135					140				
Asp	Ser	Glu	Asn	Glu	Asp	Val	Gly	Lys	His	Pro	Ala	Ser	Asp	Ser	Glu

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          165          170          175
Ala Leu Lys Pro Gln Ile Ser Asp Ser Glu Ser Glu Glu Pro Pro Arg
          180          185          190
His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met
          195          200          205
Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser
          210          215          220
Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
225          230          235          240
Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
          245          250          255
Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
          260          265          270
Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
          275          280          285
Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
          290          295          300
Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala
305          310          315          320
Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu
          325          330          335
Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp
          340          345          350
Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu
          355          360          365
Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly
          370          375          380
Glu Glu Glu Lys Val Ala Lys Arg Lys Ala Ala Val Leu Ser Asp Ser
385          390          395          400
Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp
          405          410          415
Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg
          420          425          430
Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
          435          440          445
Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
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Gly Asp Glu Glu Glu Glu Phe
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<210> 3715

<211> 288

<212> DNA

<213> Homo sapiens

<400> 3715

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accacatccc tggaggctcg aattattgcc ttgtctggca agatccgcag ttatgaagaa
120

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cacttggaga aacatcgaaa ggacaaagcc cacaaacgct atctgcta atgacattgac
 180
 cagaggaaaa agatgctcaa aaacctccgt aacaccaact atgatgtctt tgagaagata
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<210> 3716
 <211> 96
 <212> PRT
 <213> Homo sapiens

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 Gly Lys Ile Arg Ser Tyr Glu Glu His Leu Glu Lys His Arg Lys Asp
 35 40 45
 Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys
 50 55 60
 Met Leu Lys Asn Leu Arg Asn Thr Asn Tyr Asp Val Phe Glu Lys Ile
 65 70 75 80
 Cys Trp Gly Leu Gly Ile Glu Tyr Thr Phe Pro Pro Leu Tyr Tyr Arg
 85 90 95

<210> 3717
 <211> 1545
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
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 300
 ggactgatct gattttttaa cttcatccct aggattgata ttgctgatga tattattaat
 360
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 540
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 780
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 840
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 1080
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 1140
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<210> 3718

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3718

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			20					25					30		
Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
			35				40					45			
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
	50					55				60					
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
65					70					75				80	
Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
			85					90					95		
Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
			100					105					110		
Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
			115				120					125			
Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

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Ser Leu Asp Phe Gly Gln Ser Gln Arg Phe Leu His Asp Pro Glu Lys
145              150              155              160
Leu Asp Ser Ser Ser Lys Ala Leu Ser Phe Thr Arg Ile Arg Arg Ser
      165              170              175
Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
      180              185              190
Leu Val Lys Lys Leu Gln Lys Lys Ile Arg Gln Phe Glu Glu Gln Phe
      195              200              205
Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
      210              215              220
Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
225              230              235              240
Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
      245              250              255
Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
      260              265              270
Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
      275              280              285
Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
      290              295              300
Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys
305              310              315              320
Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
      325              330              335
Leu Leu Tyr Tyr Glu Ser Gln His Gly Arg Pro Val Thr Lys Glu Glu
      340              345              350
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<210> 3719

<211> 422

<212> DNA

<213> Homo sapiens

<400> 3719

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240
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nn
422

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<210> 3720
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala
 50 55 60
 Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His
 65 70 75 80
 Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr
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<210> 3721
 <211> 4728
 <212> DNA
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<210> 3722

<211> 1216

<212> PRT

<213> Homo sapiens

<400> 3722

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Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
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Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
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Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
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Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
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Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
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Tyr	Glu	Met	Phe	Gln	Asn	Ile	Leu	Gly	Ile	Lys	Lys	Phe	Glu	His	Gln		
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Glu	Asn	Gln	Leu	Ser	Lys	Ser	Asp	Val	Val	Leu	Ser	Phe	Ser	Leu	Glu		
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Thr	Val	Ser	Lys	Asn	Cys	Pro	Asn	Gln	Asp	Leu	Lys	Ile	Lys	Leu	Ala		
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Lys	Lys	Ala	Glu	Pro	Gln	Glu	Leu	Leu	Gln	Leu	Asp	Gly	Tyr	Thr	Val		
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Ser	His	Lys	Pro	Val	Pro	Pro	Thr	Gln	Val	Gln	Lys	Leu	Asn	Ala	Lys		
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Arg 625	Asn	Gly	Val	Arg	Gly 630	Cys	His	Arg	His	Leu 635	Cys	Tyr	Leu	Arg	Asp 640
Leu	Leu	Glu	Arg	Ala 645	Glu	Asn	Gly	Ala	Met 650	Ile	Asp	Pro	Thr	Leu	Leu 655
His	Tyr	Ser	Phe 660	Ala	Phe	Cys	Ala	Ser	His 665	Val	His	Gly	Asn	Arg	Pro 670
Asp	Gly	Ile 675	Gly	Thr	Val	Thr	Val 680	Glu	Glu	Lys	Glu	Arg 685	Phe	Glu	Glu 690
Ile	Lys 690	Glu	Arg	Leu	Arg	Val 695	Leu	Leu	Glu	Asn	Gln 700	Ile	Thr	His	Phe 705
Arg 705	Tyr	Cys	Phe	Pro	Phe 710	Gly	Arg	Pro	Glu	Gly 715	Ala	Leu	Lys	Ala	Thr 720
Leu	Ser	Leu	Leu	Glu 725	Arg	Val	Leu	Met	Lys 730	Asp	Ile	Val	Thr	Pro	Val 735
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Ala	Leu	Val 755	Asn	Tyr	Ser	Arg	Leu	Ser	Glu 760	Tyr	Ala	Lys	Ile	Glu	Glu 765
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Met	Ile	Glu	Ser 965	Cys	Val	Lys	Arg	Thr	Arg 970	Ile	Ala	Phe	Glu	Val	Lys 975
Leu	Gln	Lys 980	Thr	Ser	Arg	Ser	Thr	Asp	Phe 985	Arg	Val	Pro	Gln	Ser	Ile 990
Cys	Thr	Met 995	Phe	Asn	Val	Met	Val	Asp	Ala 1000	Lys	Ala	Gln	Ser	Thr	Lys 1005
Leu	Cys 1010	Ser	Met	Glu	Met	Gly	Gln	Glu	Phe 1015	Ala	Lys	Met	Trp	His	Gln 1020
Tyr	His	Ser	Lys	Ile	Asp	Glu	Leu	Ile	Glu	Glu	Thr	Val	Lys	Glu	Met 1025

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 Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu
 1060 1065 1070
 Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro
 1075 1080 1085
 Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln
 1090 1095 1100
 Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu
 1105 1110 1115 1120
 Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu
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 Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu
 1140 1145 1150
 Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val
 1155 1160 1165
 Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg
 1170 1175 1180
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<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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<211> 203

<212> PRT

<213> Homo sapiens

<400> 3724

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			20					25					30		
Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Asn	Pro	Asn	Glu	Lys	Leu	Lys	Val
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Asn	Phe	Gly	Thr	Pro	Glu	Phe	Leu	Ser	Pro	Glu	Val	Val	Asn	Tyr	Asp
		50				55					60				
Gln	Ile	Ser	Asp	Lys	Thr	Asp	Met	Trp	Ser	Met	Gly	Val	Ile	Thr	Tyr
65					70					75				80	
Met	Leu	Leu	Ser	Gly	Leu	Ser	Pro	Phe	Leu	Gly	Asp	Asp	Asp	Thr	Glu
				85					90					95	
Thr	Leu	Asn	Asn	Val	Leu	Ser	Gly	Asn	Trp	Tyr	Phe	Asp	Glu	Glu	Thr
			100					105					110		
Phe	Glu	Ala	Val	Ser	Asp	Glu	Ala	Lys	Asp	Phe	Val	Ser	Asn	Leu	Ile
		115					120					125			
Val	Lys	Asp	Gln	Arg	Ala	Arg	Met	Asn	Ala	Ala	Gln	Cys	Leu	Ala	His
		130				135					140				
Pro	Trp	Leu	Asn	Asn	Leu	Ala	Glu	Lys	Ala	Lys	Arg	Cys	Asn	Arg	Arg
145				150						155				160	
Leu	Lys	Ser	Gln	Ile	Leu	Leu	Lys	Lys	Tyr	Leu	Met	Lys	Arg	Arg	Trp
			165						170					175	
Lys	Lys	Asn	Phe	Ile	Ala	Val	Ser	Ala	Ala	Asn	Arg	Phe	Lys	Lys	Ile
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<210> 3725

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 3725

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 180
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 300

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 360
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 420
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 720
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<210> 3726

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3726

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		20						25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35					40					45			
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe
65					70				75					80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85				90						95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
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Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

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630

<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

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			20					25					30		
Val	Thr	Pro	Thr	Pro	Ala	Gly	Thr	Leu	Asp	Pro	Ala	Glu	Lys	Gln	Glu
		35					40					45			
Thr	Gly	Cys	Pro	Pro	Leu	Gly	Leu	Glu	Ser	Leu	Arg	Val	Ser	Asp	Ser
	50					55				60					
Arg	Leu	Glu	Ala	Ser	Ser	Ser	Gln	Ser	Phe	Gly	Leu	Gly	Pro	His	Arg
65				70					75					80	
Gly	Arg	Leu	Asn	Ile	Gln	Ser	Gly	Leu	Glu	Asp	Gly	Asp	Leu	Tyr	Asp
			85					90					95		
Gly	Ala	Trp	Cys	Ala	Glu	Glu	Gln	Asp	Ala	Asp	Pro	Trp	Phe	Gln	Val
			100					105					110		
Asp	Ala	Gly	His	Pro	Thr	Arg	Phe	Ser	Gly	Val	Ile	Thr	Gln	Gly	Arg
	115						120					125			
Asn	Ser	Val	Trp	Arg	Tyr	Asp	Trp	Val	Thr	Ser	Tyr	Lys	Val	Gln	Phe
	130					135					140				
Ser	Asn	Asp	Ser	Arg	Thr	Trp	Trp	Gly	Ser	Arg	Asn	His	Ser	Ser	Gly
145				150					155					160	
Met	Asp	Ala	Val	Phe	Pro	Ala	Asn	Ser	Asp	Pro	Glu	Thr	Pro	Val	Leu
			165					170						175	
Asn	Leu	Leu	Pro	Glu	Pro	Gln	Val	Ala	Arg	Phe	Ile	Arg	Leu	Leu	Pro
		180					185					190			
Gln	Thr	Trp	Leu	Gln	Gly	Gly	Ala	Pro	Cys	Leu	Arg	Ala	Glu	Ile	Leu
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<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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120
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180
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240
gttcaggaac caccagtgc agagcagaaa atatatactg aagacatggc ctttggagct
300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct
 360
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<210> 3730

<211> 422

<212> PRT

<213> Homo sapiens

<400> 3730

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<212> DNA
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<211> 281

<212> PRT

<213> Homo sapiens

<400> 3732

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Cys	Trp	Ala	Ser	Leu	Asn	Gln	Leu	Asp	Ser	His	Val	Leu	Leu	Cys	Phe	20	25	30	
Glu	Gly	Ile	Thr	Asp	Ala	Ser	Ser	Cys	Ala	Val	Leu	Leu	Pro	Ala	Ser	35	40	45	
Leu	Phe	Val	Asn	Ser	His	Pro	Gly	Ile	Asp	Arg	Pro	Gly	Met	Leu	Cys	50	55	60	
Ser	Phe	Arg	Ile	Pro	Gly	Ala	Trp	Ser	Cys	Ala	Trp	Ser	Leu	Asn	Ile	65	70	75	80
Gln	Ala	Asn	Asn	Cys	Phe	Ser	Thr	Gly	Leu	Ser	Arg	Arg	Val	Leu	Leu	85	90	95	
Thr	Asn	Val	Val	Thr	Gly	His	Arg	Gln	Ser	Phe	Gly	Thr	Asn	Ser	Asp	100	105	110	
Val	Leu	Ala	Gln	Gln	Phe	Ala	Leu	Met	Ala	Pro	Leu	Leu	Phe	Asn	Gly	115	120	125	
Cys	Arg	Ser	Gly	Glu	Ile	Phe	Ala	Ile	Asp	Leu	Arg	Cys	Gly	Asn	Gln	130	135	140	
Gly	Lys	Gly	Trp	Lys	Ala	Thr	Arg	Leu	Phe	His	Asp	Ser	Ala	Val	Thr	145	150	155	160
Ser	Val	Arg	Ile	Leu	Gln	Asp	Glu	Gln	Tyr	Leu	Met	Ala	Ser	Asp	Met	165	170	175	
Ala	Gly	Lys	Ile	Lys	Leu	Trp	Asp	Leu	Arg	Thr	Thr	Lys	Cys	Val	Arg	180	185	190	
Gln	Tyr	Glu	Gly	His	Val	Asn	Glu	Tyr	Ala	Tyr	Leu	Pro	Leu	His	Val	195	200	205	
His	Glu	Glu	Glu	Gly	Ile	Leu	Val	Ala	Val	Gly	Gln	Asp	Cys	Tyr	Thr	210	215	220	
Arg	Ile	Trp	Ser	Leu	His	Asp	Ala	Arg	Leu	Leu	Arg	Thr	Ile	Pro	Ser	225	230	235	240
Pro	Tyr	Pro	Ala	Ser	Lys	Ala	Asp	Ile	Pro	Ser	Val	Ala	Phe	Ser	Ser	245	250	255	
Arg	Leu	Gly	Gly	Ser	Arg	Gly	Ala	Pro	Gly	Leu	Leu	Met	Ala	Val	Gly	260	265	270	
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<210> 3733

<211> 515

<212> DNA

<213> Homo sapiens

<400> 3733

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<210> 3734

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3734

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Val Ser Gly Ser Arg Tyr Arg Arg Gly Arg Arg Gly Arg Leu Lys
20     25     30
Gly Lys Asp Pro Gly Ser Ala Pro Ser Ser Val Arg Glu Arg Glu Thr
35     40     45
Pro Gly Ala Xaa Pro Cys Leu Pro Arg Arg Gly Trp Cys Val Pro Gly
50     55     60
Asp Val Arg Ser Ser Pro Pro Leu Pro Gly Trp Cys Ala Leu Ser Asp
65     70     75     80
Val Arg Ser Arg Gly Arg Ser Cys Pro Ser Ala Pro Lys Ala Ala Gly
85     90     95
Gly Leu Arg Ala Trp Gly Arg Gly Ser Gly Ala Ala Arg Ala Pro Ala
100    105    110
Pro Ala Pro Ser Pro Ser Ser Gly Xaa Ser Pro Ser Ser Arg Thr Pro
115    120    125
Arg Asp Trp Ser Ala Ser Arg Cys Trp Thr Trp Ser Gly Ala Ala Thr
130    135    140
Ala Pro Thr Pro Phe Ser Pro Ala Gln Gln Pro Pro Ser Ser His Asp
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<210> 3735

<211> 2512

<212> DNA

<213> Homo sapiens

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240
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<211> 155

<212> PRT

<213> Homo sapiens

<400> 3736

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Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
			20					25					30		
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
		35					40					45			
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
	50					55					60				
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
			85						90					95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

Lys Val Glu Pro Arg Ile Val Ile Val Glu Glu Ala Ala Glu Val Leu
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130 135 140
Glu Ala His Thr Ile Ala Thr Leu Ser Lys Ala
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<210> 3737
<211> 1046
<212> DNA
<213> Homo sapiens
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<210> 3738
<211> 348
<212> PRT
<213> Homo sapiens
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<400> 3738

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      20           25           30
Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile
      35           40           45
Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg
      50           55           60
Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala
      65           70           75           80
Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu
      85           90           95
Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe
      100          105          110
His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu
      115          120          125
Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr
      130          135          140
Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe
      145          150          155          160
Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile
      165          170          175
Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg
      180          185          190
Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe
      195          200          205
Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu
      210          215          220
Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr
      225          230          235          240
Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro
      245          250          255
Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro
      260          265          270
Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala
      275          280          285
Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro
      290          295          300
Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys
      305          310          315          320
Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly
      325          330          335
Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg
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<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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<210> 3740

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3740

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			20					25					30		
Ser	Thr	Glu	Ala	Pro	Gly	His	Pro	Gln	Glu	Asp	Gly	Lys	Gly	Gln	Leu
		35					40					45			
Ala	Gly	Glu	Ser	Pro	Gly	His	Arg	Glu	Pro	Ser	Pro	Gly	Ser	Lys	Gln

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      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Ser Pro
      130              135

```

<210> 3741

<211> 562

<212> DNA

<213> Homo sapiens

<400> 3741

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cagacagcaa gcgacggccc agctcctcaa ggccacctcc gacctcggcg ggggtggggca
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gtcgtgtcca ctgtggggat ccacgtcctg actaaccttg tgttcctaga aatccctcac
120
cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagctcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaatactg ccacaatctg
300
cgagaaggga ggcggggctt ccgagggcaa agtgcccctg ggaagggatc cgcagggaac
360
agctttgaaa ggaccacagc cccagccac gaggggagca agcacgagcc ggggagagag
420
ctctgcgctc gcacacggga ttcattctcg ccgctctg ccgtttccag caacacggag
480
ccaggcgga acagtttctc cagccattc gcctccccga ctcttctct cagggcacgg
540
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562

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<210> 3742

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3742

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Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
1              5              10              15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20              25              30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

```



```

65              70              75              80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu
              85              90              95
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly
              100              105              110
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser
              115              120              125
Ala Gly Glu Gly Phe Leu Gly Thr Gln Gly
              130              135

```

<210> 3743

<211> 468

<212> DNA

<213> Homo sapiens

<400> 3743

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nntcatgagc cttcttatac gctccatttt ggcaaggcgc tgacaatggc ggaggctgaa
60
ggcaatgcaa gctgcacagt cagtctaggg ggtgccaata tggcagagac ccacaaagcc
120
atgatcctgc aactcaatcc cagtgagaac tgcacctgga caatagaaag accagaaaac
180
aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
240
gaaaacatta aagtctttga cggaacctcc agcaatgggc ctctgctagg gcaagtctgc
300
agtaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
420
aacatcttta ttccaaagtg tggcggttac ctggatccct ggaaggat
468

```

<210> 3744

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3744

```

Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met
1              5              10              15
Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala
20              25              30
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser
35              40              45
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg
50              55              60
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser
65              70              75              80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu
85              90              95
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser
100              105              110
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln

```

115
Arg Thr Val Phe Val Phe
130

120

125

<210> 3745
<211> 345
<212> DNA
<213> Homo sapiens

<400> 3745
acgcgtcgaa aggggaagagc agaggacgct ggctctcatg gcaggatggg gtgtgtacgg
60
gacgctgtgg gagaggaaaa cagccacatg tgggctggct gcttggagga gacacatgag
120
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac
180
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga
240
tgcagcatct gctcggagc cctctcgtct tcggtgccag gcctgccagg ccaagccccg
300
attctcaggg gcggcaggag gtgggaggca cgtttgggag gatcc
345

<210> 3746
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3746
Met Ala Gly Trp Cys Val Tyr Gly Thr Leu Trp Glu Arg Lys Thr Ala
1 5 10 15
Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val
20 25 30
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr
35 40 45
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile
50 55 60
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys
65 70 75 80
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly
85 90 95
Arg His Val Trp Ala Asp
100

<210> 3747
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3747
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60
cgcgccggac cctgggatgc tcttcggccg catcccgctg cgctacgcca tactggtgag
120

aagggggcgc gcccggccac tttctgcctg agccccgcac cctctctggt ggtctctct
 180
 ggggcgcccc tgccaatecc cgcttcccc tcccgcatat gcagatgcgc ttcgatggac
 240
 gcctgggctt ccccggcgga ttcgtggaca cgcaggacag aagcctagag gacgggctga
 300
 accgcgagct gcgcgaggag ctgggcgaag cggctgccgc tttccgcgtg gagcgactg
 360
 actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggcccactt ctatgccaa
 420
 cgtctgacgc tcgaggagct gttggctgtg gaggccggcg caacacgcgc caaggaccac
 480
 gggctggagg tgggaccagc ctgggactct gtccctttcc caatttctc ttctcccaaa
 540
 gctttctctc cccaagaaa gcacccctgg agaaaagtct ttgccctct gaccttgccc
 600
 tctcccagc tttcttggtg gagttgggat cgtgatcatc tatactctga attagtactg
 660
 ccaacctggg cttctgttaa aggtctttcc caccctttac caggagagat cctttctaga
 720
 acacactcat ccattgtctc ctgctgttcc ctattgacag tgtgatagat tatcacatta
 780
 tctaggtgtg gcaacctagg
 800

<210> 3748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3748

Met	Gln	Met	Arg	Phe	Asp	Gly	Arg	Leu	Gly	Phe	Pro	Gly	Gly	Phe	Val
1				5					10					15	
Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
			20					25					30		
Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
		35				40						45			
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
	50					55					60				
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65					70					75				80	
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
				85					90					95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
		100						105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
		115				120						125			
Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
		130					135								

<210> 3749

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3749

cgcgccccct gggaggatcc tgccaagtgg gtgatggaca catatccatg ggcagccagc
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 ccacaacagc acgagtggcc tcccctgctg cagttacggc ctgaggatgt cggcttcgac
 120
 ggctactcca tgccctcgga gggatcgaca agcaagcaga tgccccccag tgatgctgaa
 180
 ggtgaccgcg tgatgaacat gctgatgagg ctgcaggagg cagccaacta ctccagcccc
 240
 cagagctatg acagcgactc caacagcaac agccatcacg atgacatctt ggactcctct
 300
 ttggagtcca ctctgtgaca gggggccgga gccagcgcc ctctcttctt cctcaccgca
 360
 ttccacctgc atccccaca tcacctgaa gatgacttcc tgagccagcc cccagccaca
 420
 gccttagagc tgcggaaca ccgagacccc ccgtccttca gcctcgacct ggggtgcaggc
 480
 atcccgggcc agctgcctgc ggaccgcttc cttccacagc gagaactgca ctaccttctg
 540
 ttgtacttta attattgttt tgccctgttg ctgtgacctc cctaagacac tgaagatact
 600
 tctcgggaaa ggatcatcgc cgttgaaatg aaaaaaaaaa aaaaaaaaaa
 648

<210> 3750

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
1				5					10					15	
Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35					40					45			
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50					55					60				
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65					70				75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85					90						95	
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

<210> 3751

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3751

gcgcgctgt ctgccctcgc acgtgcgctg gcagggccgc cgctcgcgcc tcaccatgga
 60

cctggccccg ctgctgctcg cggctcggtc gccccgagcg gggccaaggg cgtttctctac
 120
 acgcaggggc agagtccgga gccgcggacc cgcgaggtat ttctactacg tggaccacca
 180
 gggccagctt ttcttgatg attccaaaat gaagaatttc atcacctgct tcaaagaccc
 240
 gcagttcctg gtcaccttct tctcccgctt gagaccaaac cgcagcgggc gctacgaggg
 300
 cgctttcccc ttctctctgc cctgcggcag agagcgcaac ttctgcgct gcgaggaccg
 360
 gccggtggtc ttcacgcacc tgetgaccgc ggaccacggg cctccgcgc tctctactg
 420
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 caacgggcgc ctgtaccacc cggcgccgga gcgtgcgggc ggcgtgggccc tgggtgcgcc
 540
 ttcgcccctg gcc
 554

<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

Ala	Arg	Leu	Ser	Ala	Leu	Ala	Arg	Ala	Leu	Ala	Gly	Pro	Pro	Pro	Arg
1			5					10					15		
Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro	
			20				25					30			
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Gln	Gly	Gln	Ser	Pro	Glu	Pro	
		35				40				45					
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
	50					55					60				
Pro	Gly														
65															

<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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 60
 gaaccactc tcctaaccga cccccgagag gcggagagaa tgtgggagca cttcagagag
 120
 gcctaggctc cggagatcgg gccatctggg ctctgaaagc aaattagttt tccaactcat
 180
 gtctggctcc ggcgttaccc agacgcctgg aaggctcttc ctgcagtctg atcaccattt
 240
 ttctgctgc actgaccaat cagctccctt tggccttcaa cctcggaat gatggattag
 300
 gggagtctag aaatggacga agccctagaa acgcagctga agacgagcag aggacgcttc
 360

tcggctacag aatccctccc caccttggag ctcttatctc aggtggacat ggactgcagg
 420
 gtccacatgc gacccatcgg cctgacgtgg gtgctgcaac tgacctggc atggatcctg
 480
 ctagaagcct gtggagggag ccgcccactc caagccaggt cccagcaaca ccatgggctg
 540
 gcagctgac tgaggcaaagg caagctgcac ctggcaggac cttgttgtcc ctcagagatg
 600
 gacacaacag agacatcggg ccttggaac catccagaac gctgtggagt gccgagccct
 660
 gaatgcgaat ccttcctgga acacctccaa cgtgcccttc gcagtgcgtt ccgcctgcgg
 720
 ctattggggg tacgccaggc acagccgctc tgcgaggagc tctgccaggc ctggttcgcc
 780
 aactgcgaag atgatatac ctgcccgcg acttggtcc cactctcaga aaaaaggggc
 840
 tgtgagcca gctgccttac ctatggacag accttcgcag acgggacgga cttttgtcgc
 900
 tcggctctgg gccacgcct accggtggct gctcctggag ccggtcactg cttcaacatc
 960
 tccatctccg cggtagctcg tcccagacca ggacgacggg gccgggaagc tccctcccg
 1020
 cgttcccgca gccctgcac ctccatcctg gacgtgcgg gcagcgggag tggcagtgga
 1080
 agcggcagcg gccctagcg gacgcgtggc cctgagttgg gggagcgacc cttccccag
 1140
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 1200
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 1260
 agaaatgacc caactctctc acttttcct ctccccttg aataaagtcg ccagctaaaa
 1320
 aaaaagtcca tgtccacctg agataagagc tgttggctgg attgggggggt ccacatgcga
 1380
 cccatcggcc tgacgtgggt gctgcaactg acctcgcat ggatcc
 1426

<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

Met	Asp	Glu	Ala	Leu	Glu	Thr	Gln	Leu	Lys	Thr	Ser	Arg	Gly	Arg	Phe
1				5					10					15	
Ser	Ala	Thr	Glu	Ser	Leu	Pro	Thr	Leu	Glu	Leu	Leu	Ser	Gln	Val	Asp
			20					25					30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35				40					45				
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
	50				55					60					
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65				70					75					80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

```
<210> 3755
<211> 3149
<212> DNA
<213> Homo sapiens
```

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<400> 3755
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120
aacaatacct cgataaccac gccaaactctt agtcccagcc agcagccgct tccgacagaa
180
ctgaatgtaa cttcaccgag taaagaggag tgtggggccat gcacagacac agctcatgtc
240
tcattaatca caccaacaaa aagatcctgt ggtacagatt cacagtctga gaatgaggct
300
tcaccagtaa aacggccacg actacttgag aatacggaac ggtccgagga aaccagtcga
360
tctaaacaga agagtcgacg tcgggtgcttc cagtgccaaa ccaaactgga gctgggtgcag
420
caggaattgg gatcgtgtcg ctgcggttat gtgttctgta tgttacatcg cctccccgag
480
cagcacgact gcacattcga ccacatgggc cgtggccggg aggaagccat catgaaaatg
540
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600
aggccaggca tggccaccac gtgacgctgt tcttagttca ctaatgttag ccttatttag
660
gacaaagtca gccagacacc ttgtactggg cacgcgtcag actgcagcca gtccgtttcc
720

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tttcttttagc cagccatcct ggtactgtag tttagggggt gatgggtgggt gaaattgatt
780
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840
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900
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960
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1020
atcggccttt cacctcttca cttatcctta gtcccagtag ccaggatacc tgatggccac
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1320
ggtcacgaga agcagccaga gtgccccgcc tccgccggct ctggtctgcc attcgccagt
1380
gcagggatct ggcacggacc agatgtggcg aatggcagca cagcgcggtg gctgggtctg
1440
cacactggcc tctgcagcca gatttctata ttgggagttt tttaaaaaga catttcatag
1500
ccaacaagaa tcagtagaag tgctgggagc agcagctggg gaagctgccg cccacgggct
1560
ctgccccttc cagctggagc cgcccgtgcc tccaggggcc aagaggatga tgtcgtggcc
1620
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1680
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1980
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2040
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2100
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2160
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2220
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2280
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2340

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 2400
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 2520
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 2580
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 2700
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 2760
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 2820
 accaatcgta tgaaagtttg gttttcttgt ttcacccctt ctctaagtg cccctgggt
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 3000
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 3060
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 3149

<210> 3756

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3756

Met	Asn	Leu	Cys	Ser	Lys	Cys	Phe	Ala	Asp	Phe	Gln	Lys	Lys	Gln	Pro
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Asp	Asp	Asp	Ser	Ala	Pro	Ser	Thr	Ser	Asn	Ser	Gln	Ser	Asp	Leu	Phe
			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro	
		35					40				45				
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
	50					55					60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70					75				80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
			85					90						95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105						110	
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
		115					120					125			
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
	130					135					140				
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Ile	Met	Lys	Met	Val	Lys	Leu	Asp	Arg	Lys	Val	Gly	Arg	Ser	Cys	Gln
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<210> 3757

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 3757

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<213> Homo sapiens

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Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
           50           55           60
Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
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Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
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Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
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Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
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Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
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Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
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<212> DNA

<213> Homo sapiens

<400> 3759

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<212> PRT

<213> Homo sapiens

<400> 3760

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			20					25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
		35					40					45			
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
	50					55					60				
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
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Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
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Phe	Val	Leu	Leu												
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<211> 458

<212> DNA

<213> Homo sapiens

<400> 3761

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<400> 3762
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<400> 3763
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<212> PRT

<213> Homo sapiens

<400> 3764

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			20					25					30		
Ser	Pro	Arg	Cys	Ala	Ala	Thr	Met	Ala	Ser	Ser	Asp	Glu	Asp	Gly	Thr
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	50					55					60				
Arg	Arg	Arg	Leu	Gly	Phe	Leu	Ala	Thr	Ala	Trp	Leu	Thr	Phe	Tyr	Asp
65					70					75				80	
Ile	Ala	Met	Thr	Ala	Gly	Trp	Leu	Val	Leu	Ala	Ile	Ala	Met	Val	Arg
				85					90					95	
Phe	Tyr	Met	Glu	Lys	Gly	Thr	His	Arg	Gly	Leu	Tyr	Lys	Ser	Ile	Gln
		100						105					110		
Lys	Thr	Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His
	115						120					125			
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Pro	Ile	Gln	Asn	Glu	Glu	Ser	Val	Val	Leu	Phe	Leu	Val	Ala	Trp	Thr
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Val	Thr	Glu	Ile	Thr	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	Leu	Leu	Asp
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His	Leu	Pro	Tyr	Phe	Ile	Lys	Trp	Ala	Arg	Tyr	Asn	Phe	Phe	Ile	Ile
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Leu	Pro	Tyr	Val	Lys	Lys	Thr	Gly	Met	Phe	Ser	Ile	Arg	Leu	Pro	Asn
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<211> 464

<212> PRT

<213> Homo sapiens

<400> 3766

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      35           40           45
Lys Val Lys Lys Met Gly Leu Gly His Glu Gln Gly Phe Gly Ala Pro
      50           55           60
Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp
      65           70           75           80
Arg Lys Ile Cys Arg Asn Cys Lys Cys Gly Gln Glu Glu His Asp Val
      85           90           95
Leu Leu Ser Asn Glu Glu Asp Arg Lys Val Gly Lys Leu Phe Glu Asp
      100          105          110
Thr Lys Tyr Thr Thr Leu Ile Ala Lys Leu Lys Ser Asp Gly Ile Pro
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      165          170          175
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Glu Leu Ser Pro Arg Glu Val Lys Glu Met Glu Gln Phe Val Lys Lys
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Leu	Cys	Ser	Cys	Cys	Ser	Lys	Cys	Leu	Ile	Gly	Gln	Lys	Phe	Met	Pro
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<211> 2439

<212> DNA

<213> Homo sapiens

<400> 3767

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<211> 379

<212> PRT

<213> Homo sapiens

<400> 3768

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<211> 447

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<213> Homo sapiens

<400> 3770

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<212> DNA

<213> Homo sapiens

<400> 3771

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<211> 280

<212> PRT

<213> Homo sapiens

<400> 3772

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<211> 2664

<212> DNA

<213> Homo sapiens

<400> 3773

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 3775

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<213> Homo sapiens

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<400> 3778

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 65      70      75      80
Thr Glu Lys Thr Glu Asp Ser Ser Val Pro Glu Thr Pro Asp Asn Glu
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<211> 530

<212> PRT

<213> Homo sapiens

<400> 3780

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Ser	Arg	Asp	Met	Arg	Asp	Ser	Arg	Glu	Met	Arg	Asp	Tyr	Ser	Arg
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Thr	Lys	Glu	Ser	Arg	Asp	Pro	Arg	Asp	Ser	Arg	Ser	Thr	Arg	Asp
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 Ser Tyr Pro Glu Arg Asp Arg Tyr Pro Glu Arg Asp Asn Arg Asp Gln
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<210> 3781

<211> 1364

<212> DNA

<213> Homo sapiens

<400> 3781

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<212> PRT

<213> Homo sapiens

<400> 3782

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<210> 3783

<211> 4137

<212> DNA

<213> Homo sapiens

<400> 3783

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<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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Leu	Leu	Glu	Arg	Val	Glu	Glu	Pro	Val	Leu	Gln	Asn	Gln	Ile	Arg	Glu	35	40	45	
His	Val	Ile	Ala	Ile	Glu	Asp	Ala	Phe	Val	Asn	Ser	Gln	Glu	Trp	Thr	50	55	60	
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<212> DNA

<213> Homo sapiens

<400> 3785

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<210> 3786

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3786

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Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro	Asp	Glu	Gly	Gly	Glu	Gly	Ala	Arg
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Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr	Ala	Leu	His	Gly	Gly	Phe	Gln	Arg

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Arg	Tyr	Gly	Gly	Ile	Thr	Asp	Pro	Gly	Thr	Val	Pro	Arg	Val	Pro	Ser		
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His	Phe	Ser	Arg	Leu	Pro	Leu	Gly	Gly	Trp	Ala	Glu	Asp	Gly	Gln	Ser		
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<211> 717

<212> DNA

<213> Homo sapiens

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<210> 3788

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3788

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Ser	Leu	Leu	Ser	Trp	Leu	Ser	Pro	Ser	Leu	Leu	Val	Cys	Asn	Lys	Gly			
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Ala	Ala	Val	Ile	Thr	His	Glu	Gln	Cys	Leu	Ala	Gln	Ser	Gly	Arg	Ser			
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<210> 3789

<211> 4341

<212> DNA

<213> Homo sapiens

<400> 3789

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<210> 3790
 <211> 1092
 <212> PRT
 <213> Homo sapiens

<400> 3790

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Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala
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Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu
 85          90          95
Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val
 100          105          110
Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val
 115          120          125
Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu
 130          135          140
Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu
 145          150          155          160
Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn
 165          170          175
Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn
 180          185          190
Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp
 195          200          205
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 210          215          220
Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn
 225          230          235          240
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Val Tyr Asp Val Cys Asp Asp Gln Glu Ile Gln Lys Arg Leu Ala Glu
 260          265          270
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<210> 3791

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 3791

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<211> 288

<212> PRT

<213> Homo sapiens

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Glu	Glu	Val	Ala	Cys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Ala	Arg	Glu		
		260						265					270				
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<210> 3793

<211> 360

<212> DNA

<213> Homo sapiens

<400> 3793

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<210> 3794

<211> 96

<212> PRT

<213> Homo sapiens

<400> 3794

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		20						25				30					
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Phe	Ser	Trp	Arg	Gln	Cys		
	35					40					45						
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser		
	50				55				60								
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu		
65				70				75					80				
Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp		
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<210> 3795

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3795

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<210> 3796

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3796

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Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
          35          40          45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
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Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
65          70          75          80
Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
          85          90          95
Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
          100          105          110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
          115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
          130          135          140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
          165          170          175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
          180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
          195          200          205
Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
          210          215          220
Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
          245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
          260          265          270
Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
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Glu Trp Arg Asn Glu Leu
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<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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180

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aagaacttga gcgacatgga gaacgaattc tactatcgct acccaagctt ccaggacgtg
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<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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			20					25					30		
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
			35				40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
			50			55					60				
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
65					70					75				80	
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
				85					90					95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
			115				120					125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
			130			135					140				
Leu	Leu	Ile	Met	Thr	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu	
145					150				155					160	
Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
				165					170					175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
			180					185					190		
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
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Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
			210			215					220				
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			260					265					270		
Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
			275				280					285			
Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
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Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
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Phe	Leu	Glu	Ser	Arg	Leu	His	Ile	Gln	Asp	Thr	Cys	Gly	Ile	Asn	Asn

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          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
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Met Ala Ser Ser Val Pro Leu Val Pro
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<210> 3799
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 <212> DNA
 <213> Homo sapiens

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<210> 3800
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 3800
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<210> 3801
 <211> 4070

<212> DNA

<213> Homo sapiens

<400> 3801

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<210> 3802

<211> 476

<212> PRT

<213> Homo sapiens

<400> 3802

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			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
		35					40					45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
	50					55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
65					70				75					80	
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105						110	
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

115	120	125
Ile Val Tyr Val Met Thr Gly Met Tyr Gly Asp Pro Ser Glu Met Gly		
130	135	140
Ala Gly Ile Cys Leu Leu Ile Ile Ile Gln Leu Phe Val Ala Gly Leu		
145	150	155
Ile Val Leu Leu Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly		
165	170	175
Ser Gly Ile Ser Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val		
180	185	190
Trp Lys Ala Phe Ser Pro Thr Thr Ile Asn Thr Gly Arg Gly Thr Glu		
195	200	205
Phe Glu Gly Ala Val Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr		
210	215	220
Asp Lys Val Arg Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro		
225	230	235
Asn Leu Met Asn Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile		
245	250	255
Tyr Phe Gln Gly Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr		
260	265	270
Arg Gly Gln Tyr Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn		
275	280	285
Ile Pro Ile Ile Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile		
290	295	300
Ser Gln Met Leu Ser Ala Arg Phe Ser Gly Asn Phe Leu Val Asn Leu		
305	310	315
Leu Gly Gln Trp Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr		
325	330	335
Pro Val Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly		
340	345	350
Ser Val Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met		
355	360	365
Leu Gly Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly		
370	375	380
Ser Ser Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val		
385	390	395
Met Arg Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr		
405	410	415
Ile Pro Thr Ala Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser		
420	425	430
Val Leu Ala Asp Phe Leu Gly Ala Ile Gly Ser Gly Thr Gly Ile Leu		
435	440	445
Leu Ala Val Thr Ile Ile Tyr Gln Tyr Phe Glu Ile Phe Val Lys Glu		
450	455	460
Gln Ser Glu Val Gly Ser Met Gly Ala Leu Leu Phe		
465	470	475

<210> 3803

<211> 345

<212> DNA

<213> Homo sapiens

<400> 3803

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 120
 aaatatgccc acttgagtga tgagcttcat gtattaattg aagtgtttgc tccacctggg
 180
 gaagcttatt cacgtatgag tcatgcattg gaagagatta aaaaattcct gggtcctgac
 240
 tacaatgatg aaattcgtca ggaacaacta cgtgaattat cttacttaaa tggctcagag
 300
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 345

<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

Pro	Arg	Gly	Asn	Ser	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Thr	Gly	Ala	Lys
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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu	Glu
			20					25					30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
			35				40					45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
	50				55						60				
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70					75				80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
			85					90						95	
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
			100					105						110	
Ile	Arg	Ile													
			115												

<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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 120
 aagagcccggt tgcctaccag atgccaggcc ctgtgcttcc tctgacctt gaggttttgg
 180
 cttgtgatca accaggaggg aaacatggtt actgctcgcc aggaacctcg cctggctcctg
 240
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 300
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 360
 gagatagagg gcagggactg tggcgaggcc gccgcccagt ggataaccag cttctgaag
 420

tcacagccct accgcctggt gcacttcgag cctcacatgc gaccgagacg tcctcatcaa
480
atagcagact tgttccgacc caaggaccag attgcttact cagacaccag cccattcttg
540
atcctttctg aggcgtcgct ggcggtatct aactccaggc tagagaagaa agttaagca
600
accaacttca ggcccaatat tgtaatttca ggatgcgatg tctatgcaga ggattcttgg
660
gatgagcttc ttattggtga cgtggaactg aaaagggatg tggcttggtc cagatgcatt
720
ttaaccacag tggacccaga caccggtgtc atgagcagga aggaaccgct ggaaacactg
780
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840
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900
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960
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1020
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1080
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1140
aatgacaaga caggattctg aaaactcccc gtttaactga ttatggaata gttctttctc
1200
ctgcttctcc gtttatctac caagagcgca gacttgcac cgtgcactac cactcgtag
1260
agaaagagaa gaagagaaa aggaagagtg ggtgggctgg aagaatgtcc tagaatgtgt
1320
tattgcccct gttcatgagg tacgcaatga aaattaaatt gcaccccaaa tatggctgga
1380
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1440
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1560
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1620
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1680
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1740
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1800
attttgtcct ttgattatat tgggaagtgt actaaacttg aaaaatgttt ttaaaactgt
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1920
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1923

<210> 3806

<211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3806

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Asp Lys Ser Pro Leu Pro Thr Arg Cys Gln Ala Leu Cys Phe Leu Leu
 20          25          30
Pro Leu Arg Phe Trp Leu Val Ile Asn Gln Glu Gly Asn Met Val Thr
 35          40          45
Ala Arg Gln Glu Pro Arg Leu Val Leu Ile Ser Leu Thr Cys Asp Gly
 50          55          60
Asp Thr Leu Thr Leu Ser Ala Ala Tyr Thr Lys Asp Leu Leu Leu Pro
 65          70          75          80
Ile Lys Thr Pro Thr Thr Asn Ala Val His Lys Cys Arg Val His Gly
 85          90          95
Leu Glu Ile Glu Gly Arg Asp Cys Gly Glu Ala Ala Ala Gln Trp Ile
 100         105         110
Thr Ser Phe Leu Lys Ser Gln Pro Tyr Arg Leu Val His Phe Glu Pro
 115         120         125
His Met Arg Pro Arg Arg Pro His Gln Ile Ala Asp Leu Phe Arg Pro
 130         135         140
Lys Asp Gln Ile Ala Tyr Ser Asp Thr Ser Pro Phe Leu Ile Leu Ser
 145         150         155         160
Glu Ala Ser Leu Ala Asp Leu Asn Ser Arg Leu Glu Lys Lys Val Lys
 165         170         175
Ala Thr Asn Phe Arg Pro Asn Ile Val Ile Ser Gly Cys Asp Val Tyr
 180         185         190
Ala Glu Asp Ser Trp Asp Glu Leu Leu Ile Gly Asp Val Glu Leu Lys
 195         200         205
Arg Val Met Ala Cys Ser Arg Cys Ile Leu Thr Thr Val Asp Pro Asp
 210         215         220
Thr Gly Val Met Ser Arg Lys Glu Pro Leu Glu Thr Leu Lys Ser Tyr
 225         230         235         240
Arg Gln Cys Asp Pro Ser Glu Arg Lys Leu Tyr Gly Lys Ser Pro Leu
 245         250         255
Phe Gly Gln Tyr Phe Val Leu Glu Asn Pro Gly Thr Ile Lys Val Gly
 260         265         270
Asp Pro Val Tyr Leu Leu Gly Gln
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<210> 3807
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 3807

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120
cagggagggtc gcttcccggg gctcagctac caccgggtc ccagcggcag agggagcgcg
180

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ccctccccac gctccgcccc tgggtggctg cgtcctttct gggccttttc tttttggccc
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 372

<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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Arg	Tyr	Pro	Arg	Ala	Val	Ile	Val	Pro	Tyr	Leu	Val	Asp	Asp	Asp	Ala
			20					25				30			
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
			35				40					45			
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
		50				55					60				
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
65					70					75				80	
Gly	Gln	Phe	Ala	Ala											
					85										

<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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 120
 ataagctgtg actttttgcc cctgatgcca taagttggag ggtcctctgc tcaaaacata
 180
 tggtacacac ttctccttct ttcatctgg tatcatgtat catctctcag atccaataag
 240
 aaaacattcc cacgtccttc cctccctccc tagtaccaag gtcctcatct cagttttcat
 300
 ggggccatgg agggctgcct ctagtgatga gctggaatct taaggcctga aatagagcca
 360
 gactgcagca gtcccaagtc ctggagagct tcaagtaact gctcccgcgc agagccaata
 420
 aaggaattct ccaggaaggt aggcaggcct cctacacat cccgcagggt atacaggggc
 480
 actcgacca ggcccagcac ctccagcccc tggtccttgg cgcgtgttgc gccggcctcc
 540
 acagccaaca gctcctcgag ctccagacgt tggcatagaa gtgccacaac gcgtggccct
 600

gacccgacgt gggagctgcg gtagtcagtg cgctccacgc ggaaagcggc agccgcttcg
 660
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 720
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 780
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 1020
 gtacattttg tctgggttttc tagttaaggc aggaggataa atctgttgcc tgtttttcca
 1080
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 1140
 tcttactaat cttttctcaa tacctaaagt tcaaaatctc tttgtcaat ctgttatcaa
 1200
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 1221

<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

Ala	Gly	Ile	Leu	Arg	Pro	Glu	Ile	Glu	Pro	Asp	Cys	Ser	Ser	Pro	Lys
1				5					10					15	
Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr
			35				40					45			
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
	50					55					60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
65					70				75					80	
Trp	His	Arg	Ser	Ala	Thr	Thr	Arg	Gly	Pro	Asp	Pro	Thr	Trp	Glu	Leu
				85					90					95	

Arg

<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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 120

acaccacgcc agatatctgg gcagcagggga catctgacct ggggtgcttg ctggcagcac
 180
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 296

<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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Pro	Val	Leu	Lys	Ala	Gln	Asn	Cys	Arg	Pro	Ser	Gly	Arg	Pro	Val	Leu
			20					25					30		
Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
		35					40					45			
Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
	50					55					60				
Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
65					70					75				80	
Cys	Trp	Ala	Trp	Val	Gly	Arg	Ser	Gly	Thr	Gly	Pro	Ser	Arg		
				85					90						

<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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 120
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 180
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 240
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 300
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 360
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 420
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 540
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 aatcccagtg gtgagacagc attcaaagcc atgatggagt cctttggctg ggcccggcgc
 660

cctatgctgg agcgaattca cttgattcga aaagatgtgc ctatcactat gatctacggg
 720
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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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Gln	Asn	Asp	Arg	Thr	Pro	Leu	Val	Met	Val	His	Gly	Phe	Gly	Gly	Gly
		20						25					30		
Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
		35					40					45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50					55				60					
Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
65					70				75					80	
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
			85					90					95		
His	Ser	Leu	Gly	Gly	Phe	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro
		100					105					110			
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
	115					120					125				
Arg	Pro	Thr	Asn	Pro	Ser	Glu	Ile	Arg	Ala	Pro	Pro	Ala	Trp	Val	Lys
	130					135					140				
Ala	Val	Ala	Ser	Val	Leu	Gly	Arg	Ser	Asn	Pro	Leu	Ala	Val	Leu	Arg
145					150				155					160	
Val	Ala	Gly	Pro	Trp	Gly	Pro	Gly	Leu	Val	Gln	Arg	Phe	Arg	Pro	Asp

				165					170					175					
Phe	Lys	Arg	Lys	Phe	Ala	Asp	Phe	Phe	Glu	Asp	Asp	Thr	Ile	Ser	Glu				
			180						185					190					
Tyr	Ile	Tyr	His	Cys	Asn	Ala	Gln	Asn	Pro	Ser	Gly	Glu	Thr	Ala	Phe				
		195					200						205						
Lys	Ala	Met	Met	Glu	Ser	Phe	Gly	Trp	Ala	Arg	Arg	Pro	Met	Leu	Glu				
	210					215						220							
Arg	Ile	His	Leu	Ile	Arg	Lys	Asp	Val	Pro	Ile	Thr	Met	Ile	Tyr	Gly				
225					230						235				240				
Ser	Asp	Thr	Trp	Ile	Asp	Thr	Ser	Thr	Gly	Lys	Lys	Val	Lys	Met	Gln				
			245						250					255					
Arg	Pro	Asp	Ser	Tyr	Val	Arg	Asp	Met	Glu	Ile	Lys	Gly	Ala	Ser	His				
			260				265						270						
His	Val	Tyr	Ala	Asp	Gln	Pro	His	Ile	Phe	Asn	Ala	Val	Val	Glu	Glu				
		275					280						285						
Ile	Cys	Asp	Ser	Val	Asp														
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<210> 3815

<211> 3669

<212> DNA

<213> Homo sapiens

<400> 3815

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900

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<212> DNA

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Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
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Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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			20					25					30		
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
		35					40					45			
Leu	Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro
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Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr
65					70					75					80
Ile	Ile	Ala	Arg	Thr	Lys	Gly	Leu	Ser	Ile	Leu	Thr	His	Asp	Val	Gln
				85					90					95	
Ser	Gln	Leu	Asn	Met	Gly	Arg	Phe	Gly	Glu	Ala	Gly	Asp	Ser	Leu	Val
			100					105					110		
Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala
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Gln	Gly	Cys	Ala	Val	Leu	Arg	Ala	Thr	Pro	Leu	Ala	Asp	Met	Thr	Pro
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Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe
		180					185						190		
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Leu	Ala	Arg	Ser	Arg	Cys	Ala	Leu	Phe	Ser	Gly	Pro	Leu	Val	Gln	Ala
			245						250					255	
Val	Ser	Ala	Leu	Val	Gly	Phe	Ala	Thr	Glu	Pro	Gln	Phe	Leu	Gly	Arg
			260					265					270		
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu
		275					280					285			
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Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp				
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His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys				320
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<210> 3835

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 3835

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 480
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<210> 3836

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3836

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Glu	Leu	Met	Arg	Ala	Gly	Leu	Val	Val	Ser	Arg	Asp	Gly	Ala	Pro	Asp
			20					25					30		
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

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465

470

475

<210> 3837

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 3837

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120
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240
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 2084

<210> 3838

<211> 468

<212> PRT

<213> Homo sapiens

<400> 3838

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			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
		35					40					45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50					55					60				
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
65					70					75					80
Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85					90					95	
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
		115					120					125			
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
	130					135					140				
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145					150					155					160
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
				165					170					175	
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<210> 3839
<211> 758
<212> DNA
<213> Homo sapiens
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120
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180
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240
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300
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tccttttggga ccagctcttta ccagccccc cctgcacett gtttgggggg agttcactct
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 420
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 480
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 540
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 660
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<210> 3840

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

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		20						25					30		
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40					45			
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50					55					60				
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65					70					75					80
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
				85					90					95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
			100					105					110		
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
		115					120					125			
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130					135						140			
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
145					150					155					160
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
				165					170					175	
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
			180					185						190	
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
		195					200					205			
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
	210					215					220				
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
225					230					235					240
Ser	Ala	Thr	Ser	Ala	Trp	Ala	Gly	Ala	Phe	His	Gly				

245

250

<210> 3841
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 3841
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 180
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 240
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<210> 3842
 <211> 122
 <212> PRT
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<400> 3842
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 35 40 45
 Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser
 50 55 60
 Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile
 65 70 75 80
 Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu
 85 90 95
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 100 105 110
 Leu Pro Gly Asp Gly Gly Ser Gly Pro Ala
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<210> 3843
 <211> 712
 <212> DNA
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<400> 3843
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 180
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<210> 3844

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3844

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Arg	Gly	Arg	Gly	Ser	Glu	Lys	Arg	Lys	Lys	Lys	Ser	Arg	Lys	Asp	Thr
			20					25				30			
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
		35					40					45			
Ala	Pro	Gly	Ala	Glu	Ala	Ser	Pro	Ser	Pro	Cys	Ile	Thr	Glu	Arg	Ser
	50					55				60					
Lys	Gln	Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65				70						75				80	
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85					90					95		
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
			100					105					110		
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
		115				120						125			
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<210> 3845

<211> 2302

<212> DNA

<213> Homo sapiens

<400> 3845

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

<400> 3856

Xaa	Ala	Ala	Thr	Met	Ala	Thr	Tyr	Asn	Gln	Leu	Ser	Tyr	Ala	Gln	Lys
1				5				10					15		
Ala	Lys	Tyr	His	Leu	Cys	Ser	Ala	Gly	Trp	Leu	Glu	Thr	Gly	Arg	Val
			20					25					30		
Ala	Tyr	Pro	Thr	Ala	Phe	Ala	Ser	Gln	Asn	Cys	Gly	Ser	Gly	Val	Val

35 40 45
 Gly Ile Val Asp Tyr Gly Pro Arg Pro Asn Lys Ser Glu Met Trp Asp
 50 55 60
 Val Phe Cys Tyr Arg Met Lys Asp Val Asn Cys Thr Cys Lys Val Gly
 65 70 75 80
 Tyr Val Gly Asp Gly Phe Ser Cys Ser Gly Asn Leu Leu Gln Val Leu
 85 90 95
 Met Ser Phe Pro Ser Leu Thr Asn Phe Leu Thr Glu Val Leu Ala Tyr
 100 105 110
 Ser Asn Ser Ser Ala Arg Gly Arg Ala Phe Leu Glu His Leu Thr Asp
 115 120 125
 Leu Ser Ile Arg Gly Thr Leu Phe Val Pro Gln Asn Ser Gly Leu Gly
 130 135 140
 Glu Asn Glu Thr Leu Ser Gly Arg Asp Ile Glu His His Leu Ala Asn
 145 150 155 160
 Val Ser Met Phe Phe Tyr Asn Asp Leu Val Asn Gly Thr Xaa Pro Ala
 165 170 175
 Asn Glu Gly Gly Lys Gln Ala Ala His His Cys Gln Pro Gly Pro Thr
 180 185 190
 Xaa Gln Pro Thr Glu Thr Arg Phe Val Asp Gly Arg Ala Ile Leu Gln
 195 200 205
 Trp Asp Ile Phe Ala Ser Asn Gly Ile Ile His Val Ile Ser Arg Pro
 210 215 220
 Leu Lys Ala Pro Pro Ala Pro Val Thr Leu Thr His Thr Gly Leu Gly
 225 230 235 240
 Ala Gly Ile Phe Phe Ala Ile Ile Leu Val Thr Gly Ala Val Ala Leu
 245 250 255
 Ala Ala Tyr Ser Tyr Phe Arg Ile Asn Arg Arg Thr Ile Gly Phe Gln
 260 265 270
 His Phe Glu Ser Glu Glu Asp Ile Asn Val Ala Ala Leu Gly Lys Gln
 275 280 285
 Gln Pro Glu Asn Ile Ser Asn Pro Leu Tyr Glu Ser Thr Thr Ser Ala
 290 295 300
 Pro Pro Glu Pro Ser Tyr Asp Pro Phe Thr Asp Ser Glu Glu Arg Gln
 305 310 315 320
 Leu Glu Gly Asn Asp Pro Leu Arg Thr Leu
 325 330

<210> 3857

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3857

nngcgcgcca ccacgagaac agcntccggg gcgcggtcgt gggcgtgggc gacgagagcc
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 gcgccttgcc cgacgtcatg cagggcatgg tgctcagctc catgcagcac ttcagcgagg
 120
 ccttcacca ggtcctgggc gagaagcata agcgcggcca cctggccgag gccgagggcc
 180
 acagggacac ttgcgacgaa gactcgggtg ccggcgagtc ggaccgcata gacgatggca
 240
 ctgttaatgg ccgcggctgc tccccgggag agtcgggcctc ggggggcctg tccaaaaagc
 300

tgetgctggg cagccccagc tcgctgagcc ctttctctaa gcgcatacaag ctcgagaagg
 360
 agttcgacct gcccccgcc gcgatgccca acacggagaa cgtgtactcg cagtggctcg
 420
 ccggctacgc ggcctccagg cagctcaaag atcccttctt tagcttcgga gactccagac
 480
 aatcgctttt tgcctcctcg tcggagcact ctcggagaa cgggagcttg cgcttctcca
 540
 caccgcccgg ggagctggac ggagggatct cggggcgag cggcacggga agtggaggga
 600
 gcacgccccca tattagtggc ccgggcccgg gcaggcccag ctcaaaagag ggcagacgca
 660
 gcgacacttg ttcttcacac accccattc ggcgtagtac ccagagagct caagatgtgt
 720
 ggcagttttc ggatggaagc tcgagagccc ttaagttctg agaaaatttg aagcccccg
 780
 ggggtggggtg gacgcgt
 797

<210> 3858
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 3858
 Xaa Arg Ala Thr Thr Arg Thr Ala Ser Gly Ala Arg Ser Trp Ala Trp
 1 5 10 15
 Ala Thr Arg Ala Ala Pro Cys Pro Thr Ser Cys Arg Ala Trp Cys Ser
 20 25 30
 Ala Pro Cys Ser Thr Ser Ala Arg Pro Ser Thr Arg Ser Trp Ala Arg
 35 40 45
 Ser Ile Ser Ala Ala Thr Trp Pro Arg Pro Arg Ala Thr Gly Thr Leu
 50 55 60
 Ala Thr Lys Thr Arg Trp Pro Ala Ser Arg Thr Ala
 65 70 75

<210> 3859
 <211> 1449
 <212> DNA
 <213> Homo sapiens

<400> 3859
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 60
 aaggagactc aatttgaact cagagtactg ggaaaagatt gtaacgaaac ctattcttt
 120
 tttgaagctc ggagtaaaac tgcttgcaag cacctctgga agtgcagtgt ggaacatcat
 180
 acatttttta gaatgccaga aaatgaatcc aattcactgt caagaaaact cagcaagttt
 240
 ggatccatac gttataagca ccgctacagt ggcaggacag ctttgcaaact gagccgagat
 300
 ctttctattc agcttccccg gcctgatcag aatgtgacaa gaagtcgaag caagacttac
 360

cctaagcgaa tagcacaaac acagccagct gaatcaaaca ccatcagtag gataactgca
 420
 aacatggaaa atggagaaaa tgaaggaaca attaaaatta ttgcaccttc accagtaaaa
 480
 agctttaaga aagcaaagaa tgaaaatagc cctgataccc aaagaagcaa atctcatgca
 540
 ccgtgggaag aaaatggccc ccagagtgga ctctacaatt ctcccagtga tcgcactaag
 600
 tcgccaaagt tcccttacac gcgtcgccga aacccctcct gtggaagtga caatgattct
 660
 gtacagcctg tgaggaggag gaaagcccat aacagtgggtg aagattcaga tcttaagcaa
 720
 aggaggaggt cacgttcacg ctgtaacacc agcagtggta gtgaatcaga aaattcta
 780
 agagaacacc ggaaaaagag aaacagaata cggcaggaga atgatatggt tgattcagcg
 840
 cctcagtggg aagctgtatt aaggagacaa aaggaaaaaa accaagccga cccaacaac
 900
 aggcgatcca gacacagatc tcgttcgaga agccccgata tccaagcaaa agaagagtta
 960
 tggaagcaca ttcaaaaaga acttgtggat ccatccggat tgtccgaaga acaattaaaa
 1020
 gagattccat aactaaaaat agagtgagtg ctttcagaa tcttctcacc aaagctttat
 1080
 tagtgcttga cacaaggtga cccaatccgc atcaggcatt ctcatcgcgc acgaagttac
 1140
 cgccagtatc gcaggtccca gtgttcagat ggggagcgat cagttctctc ggaagtgaat
 1200
 tcaaaaacag atcttgtacc accacttccg gtgaccatt cttcggatgc tcagggttct
 1260
 ggggatgcta cagttcatca gagaagaaat ggggtctaaag atagcctgat ggaagaaaa
 1320
 cctcagacat ctacaaacaa cctggctgga aaacacacag caaaaacaat aaaaactata
 1380
 caagcttccc gcctcaagac agagacttga tcctgatgaa ggggtcaaggg taggggtggg
 1440
 aaggttggtg
 1449

<210> 3860

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3860

Tyr	Lys	Asn	Lys	Lys	Gln	Val	Gly	Lys	Tyr	Phe	Trp	Pro	Arg	Ile	Thr
1				5				10						15	
Lys	Val	His	Phe	Lys	Glu	Thr	Gln	Phe	Glu	Leu	Arg	Val	Leu	Gly	Lys
			20					25					30		
Asp	Cys	Asn	Glu	Thr	Ser	Phe	Phe	Phe	Glu	Ala	Arg	Ser	Lys	Thr	Ala
		35					40					45			
Cys	Lys	His	Leu	Trp	Lys	Cys	Ser	Val	Glu	His	His	Thr	Phe	Phe	Arg
	50					55				60					
Met	Pro	Glu	Asn	Glu	Ser	Asn	Ser	Leu	Ser	Arg	Lys	Leu	Ser	Lys	Phe

65					70					75				80	
Gly	Ser	Ile	Arg	Tyr	Lys	His	Arg	Tyr	Ser	Gly	Arg	Thr	Ala	Leu	Gln
				85					90					95	
Met	Ser	Arg	Asp	Leu	Ser	Ile	Gln	Leu	Pro	Arg	Pro	Asp	Gln	Asn	Val
			100					105					110		
Thr	Arg	Ser	Arg	Ser	Lys	Thr	Tyr	Pro	Lys	Arg	Ile	Ala	Gln	Thr	Gln
		115					120					125			
Pro	Ala	Glu	Ser	Asn	Thr	Ile	Ser	Arg	Ile	Thr	Ala	Asn	Met	Glu	Asn
	130					135					140				
Gly	Glu	Asn	Glu	Gly	Thr	Ile	Lys	Ile	Ile	Ala	Pro	Ser	Pro	Val	Lys
145					150					155					160
Ser	Phe	Lys	Lys	Ala	Lys	Asn	Glu	Asn	Ser	Pro	Asp	Thr	Gln	Arg	Ser
				165					170					175	
Lys	Ser	His	Ala	Pro	Trp	Glu	Glu	Asn	Gly	Pro	Gln	Ser	Gly	Leu	Tyr
		180						185					190		
Asn	Ser	Pro	Ser	Asp	Arg	Thr	Lys	Ser	Pro	Lys	Phe	Pro	Tyr	Thr	Arg
		195					200					205			
Arg	Arg	Asn	Pro	Ser	Cys	Gly	Ser	Asp	Asn	Asp	Ser	Val	Gln	Pro	Val
	210					215					220				
Arg	Arg	Arg	Lys	Ala	His	Asn	Ser	Gly	Glu	Asp	Ser	Asp	Leu	Lys	Gln
225					230					235					240
Arg	Arg	Arg	Ser	Arg	Ser	Arg	Cys	Asn	Thr	Ser	Ser	Gly	Ser	Glu	Ser
			245						250					255	
Glu	Asn	Ser	Asn	Arg	Glu	His	Arg	Lys	Lys	Arg	Asn	Arg	Ile	Arg	Gln
			260					265					270		
Glu	Asn	Asp	Met	Val	Asp	Ser	Ala	Pro	Gln	Trp	Glu	Ala	Val	Leu	Arg
	275						280					285			
Arg	Gln	Lys	Glu	Lys	Asn	Gln	Ala	Asp	Pro	Asn	Asn	Arg	Arg	Ser	Arg
	290					295					300				
His	Arg	Ser	Arg	Ser	Arg	Ser	Pro	Asp	Ile	Gln	Ala	Lys	Glu	Glu	Leu
305					310					315					320
Trp	Lys	His	Ile	Gln	Lys	Glu	Leu	Val	Asp	Pro	Ser	Gly	Leu	Ser	Glu
			325						330					335	
Glu	Gln	Leu	Lys	Glu	Ile	Pro	Tyr	Thr	Lys	Ile	Glu				
			340						345						

<210> 3861

<211> 748

<212> DNA

<213> Homo sapiens

<400> 3861

nagattggag tccggccgcc ccccgacagc agccgcctcc tgccttcctc gctgctaggg
 60
 gccaccatgt cgggagacaa acttctgagc gaactcgggt ataagctggg ccgcacaatt
 120
 ggagagggca gctactccaa ggtgaagggt gccacatcca agaagtacaa ggggtaccgtg
 180
 gccatcaagg tgggtggaccg gcggcgagcg ccccgaggact tcgtcaacaa gttcctgccc
 240
 cgagagctgt ccactctgcg gggcggtgca caccgcaca tcgtgcacgt cttcgagttc
 300
 atcgaggtgt gcaacgggaa actgtacatc gtgatggaag cggccgccac cgacctgctg
 360

caagccgtgc agcgcaacgg ggcgaccccc ggagttcagg cgcgcgacct ctttgcgag
 420
 atcgccggcg ccgtgcgcta cctgcacgat catcacctgg tgcaccgga cctcaagtgc
 480
 gaaaacgtgc tgctgagccc ggacgagcgc cgcgtcaagc tcaccgactt cggcttcggc
 540
 cgccaggccc atggctaccc agacctgagc accacctact gcggctcagc cgtacgcgtc
 600
 acccgagtca tgcatttctt gagcacctac tgtctgccag gccccagagc tcatggcgaa
 660
 gagacttggg cccatccctg ccgaaaacga gacaattgaa aagtcaagta aaataaaaga
 720
 atgacatgga aataaaaaaa aaaaaaaa
 748

<210> 3862

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3862

Met	Ser	Gly	Asp	Lys	Leu	Leu	Ser	Glu	Leu	Gly	Tyr	Lys	Leu	Gly	Arg
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Thr	Ile	Gly	Glu	Gly	Ser	Tyr	Ser	Lys	Val	Lys	Val	Ala	Thr	Ser	Lys
		20						25					30		
Lys	Tyr	Lys	Gly	Thr	Val	Ala	Ile	Lys	Val	Val	Asp	Arg	Arg	Arg	Ala
		35					40					45			
Pro	Pro	Asp	Phe	Val	Asn	Lys	Phe	Leu	Pro	Arg	Glu	Leu	Ser	Ile	Leu
		50				55					60				
Arg	Gly	Val	Arg	His	Pro	His	Ile	Val	His	Val	Phe	Glu	Phe	Ile	Glu
65					70					75				80	
Val	Cys	Asn	Gly	Lys	Leu	Tyr	Ile	Val	Met	Glu	Ala	Ala	Ala	Thr	Asp
		85							90					95	
Leu	Leu	Gln	Ala	Val	Gln	Arg	Asn	Gly	Arg	Ile	Pro	Gly	Val	Gln	Ala
		100						105					110		
Arg	Asp	Leu	Phe	Ala	Gln	Ile	Ala	Gly	Ala	Val	Arg	Tyr	Leu	His	Asp
		115					120					125			
His	His	Leu	Val	His	Arg	Asp	Leu	Lys	Cys	Glu	Asn	Val	Leu	Leu	Ser
		130				135					140				
Pro	Asp	Glu	Arg	Arg	Val	Lys	Leu	Thr	Asp	Phe	Gly	Phe	Gly	Arg	Gln
145					150					155				160	
Ala	His	Gly	Tyr	Pro	Asp	Leu	Ser	Thr	Thr	Tyr	Cys	Gly	Ser	Ala	Val
			165						170					175	
Arg	Val	Thr	Arg	Val	Met	His	Phe	Leu	Ser	Thr	Tyr	Cys	Leu	Pro	Gly
		180						185					190		
Pro	Arg	Ala	His	Gly	Glu	Glu	Thr	Trp	Ala	His	Pro	Cys	Arg	Lys	Arg
		195					200					205			
Asp	Asn														
	210														

<210> 3863

<211> 341

<212> DNA

<213> Homo sapiens

<400> 3863

acgcgtgaag ggggatccag atgctgataa cgaaggccca tcagcaggaa ctctcacag
 60
 ctcaacttga ggcttcttat tttctttaat cctgggggtac agtccccacc tggacacttc
 120
 agttttgctc tcagttggga ctctgggaaa aaaactgtgt ggctgatctc cagcaggttc
 180
 ttctggtcga ggctccccga gaaccatctg gccatgggct ggcagccgag ttctcgagc
 240
 gtccaggctg acggtacatt ccaggctagc catcctatca taatcgaatc tgagtagatt
 300
 tttatcaatc gcttgggaca agccattgaa ttttcggaga g
 341

<210> 3864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3864

Met	Ala	Cys	Pro	Lys	Arg	Leu	Ile	Lys	Ile	Tyr	Ser	Asp	Ser	Ile	Met
1				5				10						15	
Ile	Gly	Trp	Leu	Ala	Trp	Asn	Val	Pro	Ser	Ala	Trp	Thr	Leu	Arg	Glu
			20					25					30		
Leu	Gly	Cys	Gln	Pro	Met	Ala	Arg	Trp	Phe	Ser	Gly	Ser	Leu	Asp	Gln
		35					40					45			
Lys	Asn	Leu	Val	Glu	Ile	Ser	His	Thr	Val	Phe	Phe	Pro	Glu	Ser	Gln
	50					55				60					
Leu	Arg	Ala	Lys	Leu	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Thr	Pro	Gly	Leu
65					70				75					80	
Lys	Lys	Ile	Gly	Ser	Leu	Lys	Val	Ser	Cys	Glu	Glu	Phe	Leu	Leu	Met
			85					90					95		
Gly	Leu	Arg	Tyr	Gln	His	Leu	Asp	Pro	Pro	Ser	Arg				
			100					105							

<210> 3865

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3865

nattgcaaaa caatatatga cacgtctttt accagccaca accttcaaca aaccaatatt
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 aatcaggaat tgacgataag cttactacat tttgaaatta tctgactttc ctcatgaaat
 120
 gagacctatg tgaagcccac ttaattttct gaaacttcac atcatgtacc ttcattgtaa
 180
 tattctgaca cttgtttcat gcagccatac cagtcacaac tttaaatttt tagtcagact
 240
 ttgctcaciaa ggtttcagga taattaatac aaatggtttg ggccagccat cacacagcag
 300
 tctcctattt acttcactac aactacagct ttcattcttc attacattac tttttctgag
 360

tagtctgggt caaatagtac aaactgaata ttccttaacc aaaatgcttg gaagtaggcc
 420
 gggagcagcg gctcaccctt gtaatcccag cattttggga ggccaaagca gacagatcac
 480
 tcaaggtcag ca
 492

<210> 3866
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 3866
 Met Tyr Leu His Cys Asn Ile Leu Thr Leu Val Ser Cys Ser His Thr
 1 5 10 15
 Ser His Asn Phe Lys Phe Leu Val Arg Leu Cys Ser Gln Gly Phe Arg
 20 25 30
 Ile Ile Asn Thr Asn Gly Leu Gly Gln Pro Ser His Ser Ser Leu Leu
 35 40 45
 Phe Thr Ser Leu Gln Leu Gln Leu Ser Phe Phe Ile Thr Leu Leu Phe
 50 55 60
 Leu Ser Ser Leu Gly Gln Ile Val Gln Thr Glu Tyr Ser Leu Thr Lys
 65 70 75 80
 Met Leu Gly Ser Arg Pro Gly Ala Ala Ala His Pro Cys Asn Pro Ser
 85 90 95
 Ile Leu Gly Gly Gln Ser Arg Gln Ile Thr Gln Gly Gln
 100 105

<210> 3867
 <211> 1032
 <212> DNA
 <213> Homo sapiens

<400> 3867
 acgctgaag gggagctccg gaagaatctg gaggagctat tccaggtgaa gatggaacgg
 60
 gagcagcatc agactgagat cagggatctc caggaccagc tctcagaaat gcacgatgaa
 120
 ctggacagtg caaagcgatc ggaggacagg gagaagggag ctctgattga ggagctctta
 180
 caggcaaaac aggatcttca agatctgctg attgccaaag aggagcaaga agacctcttg
 240
 agaaagcgag agcgtgaact caccgccttg aaggagagccc tgaaagaaga ggtttccagc
 300
 catgatcagg agatggacaa gctgaaggag caatatgatg ctgagttgca ggccctgagg
 360
 gagagtgtgg aagaagcaac caagaatgtc gaggtcttgg cgagcaggag caacacttca
 420
 gagcaagacc aggcggggac tgaaatgcgc gtgaagcttc tgcaggagga gaatgagaag
 480
 ctgcagggaa gaagcgaaga gctggagcgg agagttgctc agcttcaaag gcagatcgag
 540
 gacctgaaag gcgatgaagc caaggcgaag gaaacgctga agaagtacga gggagaaata
 600

cgacagttag aggaggccct tgtgcacgcc agaaaggaag aaaaagaagc tgtgtcagcc
 660
 agaagggccc tggagaatga actggaggct gctcagggaa atctgagtca gactacccag
 720
 gacgagaagc agttgtctga gaagctcaaa gaggagagtg agcagaagga gcagctaaga
 780
 aggttgaaga acgagatgga gaatgagcgg tggcacctgg gcaaaacccat tgagaaactg
 840
 cagaaggaga tggcagacat tgttgaggcc tcccgtaacct caaccctgga gctccagaac
 900
 cagctggatg agtataagga gaaaaaccgc agggagctcg cagaaatgca aagacagttg
 960
 aaggagaaaa cgctggaggc agaaaagtcc cgactgacag ccatgaaaat gcaggatgag
 1020
 atgcgtctga tg
 1032

<210> 3868

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3868

Thr	Arg	Glu	Gly	Glu	Leu	Arg	Lys	Asn	Leu	Glu	Glu	Leu	Phe	Gln	Val
1				5					10					15	
Lys	Met	Glu	Arg	Glu	Gln	His	Gln	Thr	Glu	Ile	Arg	Asp	Leu	Gln	Asp
			20					25					30		
Gln	Leu	Ser	Glu	Met	His	Asp	Glu	Leu	Asp	Ser	Ala	Lys	Arg	Ser	Glu
		35					40					45			
Asp	Arg	Glu	Lys	Gly	Ala	Leu	Ile	Glu	Glu	Leu	Leu	Gln	Ala	Lys	Gln
	50					55					60				
Asp	Leu	Gln	Asp	Leu	Leu	Ile	Ala	Lys	Glu	Glu	Gln	Glu	Asp	Leu	Leu
65					70					75					80
Arg	Lys	Arg	Glu	Arg	Glu	Leu	Thr	Ala	Leu	Lys	Gly	Ala	Leu	Lys	Glu
				85				90						95	
Glu	Val	Ser	Ser	His	Asp	Gln	Glu	Met	Asp	Lys	Leu	Lys	Glu	Gln	Tyr
			100					105					110		
Asp	Ala	Glu	Leu	Gln	Ala	Leu	Arg	Glu	Ser	Val	Glu	Glu	Ala	Thr	Lys
		115					120					125			
Asn	Val	Glu	Val	Leu	Ala	Ser	Arg	Ser	Asn	Thr	Ser	Glu	Gln	Asp	Gln
	130					135					140				
Ala	Gly	Thr	Glu	Met	Arg	Val	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Glu	Lys
145					150					155					160
Leu	Gln	Gly	Arg	Ser	Glu	Glu	Leu	Glu	Arg	Arg	Val	Ala	Gln	Leu	Gln
				165					170					175	
Arg	Gln	Ile	Glu	Asp	Leu	Lys	Gly	Asp	Glu	Ala	Lys	Ala	Lys	Glu	Thr
			180					185					190		
Leu	Lys	Lys	Tyr	Glu	Gly	Glu	Ile	Arg	Gln	Leu	Glu	Glu	Ala	Leu	Val
		195					200						205		
His	Ala	Arg	Lys	Glu	Glu	Lys	Glu	Ala	Val	Ser	Ala	Arg	Arg	Ala	Leu
	210					215					220				
Glu	Asn	Glu	Leu	Glu	Ala	Ala	Gln	Gly	Asn	Leu	Ser	Gln	Thr	Thr	Gln
225					230					235					240
Glu	Gln	Lys	Gln	Leu	Ser	Glu	Lys	Leu	Lys	Glu	Glu	Ser	Glu	Gln	Lys

				245					250					255					
Glu	Gln	Leu	Arg	Arg	Leu	Lys	Asn	Glu	Met	Glu	Asn	Glu	Arg	Trp	His				
			260					265					270						
Leu	Gly	Lys	Thr	Ile	Glu	Lys	Leu	Gln	Lys	Glu	Met	Ala	Asp	Ile	Val				
		275					280					285							
Glu	Ala	Ser	Arg	Thr	Ser	Thr	Leu	Glu	Leu	Gln	Asn	Gln	Leu	Asp	Glu				
	290					295				300									
Tyr	Lys	Glu	Lys	Asn	Arg	Arg	Glu	Leu	Ala	Glu	Met	Gln	Arg	Gln	Leu				
305					310					315				320					
Lys	Glu	Lys	Thr	Leu	Glu	Ala	Glu	Lys	Ser	Arg	Leu	Thr	Ala	Met	Lys				
			325					330						335					
Met	Gln	Asp	Glu	Met	Arg	Leu	Met												
			340																

<210> 3869
 <211> 1226
 <212> DNA
 <213> Homo sapiens

<400> 3869
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 120
 tgatgcacac acattccaga aatgcagagg tatgctgctg ccacggggta ggggtgcggg
 180
 aggcggcctg gcctcatggc cgcagaccgt gcccagccc gggcctggca ggtagctggc
 240
 cactgataaa tgccactggg atcctaggag aagctgggga ccatgcgtga ggtactgaag
 300
 gggaccatgg tggatggcat cctgggcact ttgtagcttg tctgaggga aggcctctgc
 360
 tgccatagaa aagctggaca catgtcacc tggggcccctg acatcctaaa atgccccact
 420
 gactaccagt cactaggaga aaggtctccg gctatgccct tcccagtgat gcttgcccca
 480
 gagtgactgg tcacaggtgg gggacaggtt tgctccagaa accgtaggcc tttcttgtct
 540
 ggccccctaa agaggaccca agatcaggaa aactccccag tttaaaaaaa tatctgtcca
 600
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35 40 45
Pro Gly Trp Gly Thr Val Cys Gly His Glu Ala Arg Pro Pro Pro Ala
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Pro Leu Pro Arg Gly Ser Ser Ile Pro Leu His Phe Trp Asn Val Cys
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<211> 66
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 Asp Leu
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<210> 3873
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<210> 3874

<211> 289
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 <213> Homo sapiens

<400> 3874

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Pro Val Gln Ser Pro Gln Arg Ser Val Asp Ser Ile Ser Gln Glu Ser
 50           55           60
Ser Thr Ser Ser Phe Ser Ser Met Ser Ala Gly Ser Arg Gln Glu Glu
 65           70           75           80
Thr Lys Lys Asp Tyr Arg Glu Val Glu Lys Leu Leu Arg Ala Val Ala
 85           90           95
Asp Gly Asp Leu Glu Met Val Arg Tyr Leu Leu Glu Trp Thr Glu Glu
100           105           110
Asp Leu Glu Asp Ala Glu Asp Thr Val Ser Ala Ala Asp Pro Glu Phe
115           120           125
Cys His Pro Leu Cys Gln Cys Pro Lys Cys Ala Pro Ala Gln Lys Arg
130           135           140
Leu Ala Lys Val Pro Ala Ser Gly Leu Gly Val Asn Val Thr Ser Gln
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Asp Gly Ser Ser Pro Leu His Val Ala Ala Leu His Gly Arg Ala Asp
165           170           175
Leu Ile Arg Leu Leu Lys His Gly Ala Asn Ala Gly Ala Arg Asn
180           185           190
Ala Asp Gln Ala Val Pro Leu His Leu Ala Cys Gln Gln Gly His Phe
195           200           205
Gln Val Val Lys Cys Leu Leu Asp Ser Asn Ala Lys Pro Asn Lys Lys
210           215           220
Asp Leu Ser Gly Asn Thr Pro Leu Ile Tyr Ala Cys Ser Gly Gly His
225           230           235           240Glu Leu
Val Ala Leu Leu Leu Gln His Gly Ala Ser Ile Asn Ala
245           250           255
Leu Thr Ile Arg Gly Asn Thr Ala Leu His Glu Ala Val Ile Glu Lys
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<210> 3875
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<400> 3875

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<210> 3876

<211> 824

<212> PRT

<213> Homo sapiens

<400> 3876

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			20					25					30	Val
Pro	Pro	Ala	Ala	Leu	Gly	Leu	Val	Ser	Ser	Arg	Thr	Ser	Gly	Ala
			35				40					45		Val
Pro	Pro	Lys	Glu	Glu	Glu	Leu	Arg	Ala	Ala	Val	Glu	Val	Leu	Arg
			50			55					60			Gly
His	Gly	Leu	His	Ser	Val	Leu	Glu	Glu	Trp	Phe	Val	Glu	Val	Leu
65					70				75					80
Asn	Asp	Leu	Gln	Ala	Asn	Ile	Ser	Pro	Glu	Phe	Trp	Asn	Ala	Ile
				85					90				95	Ser
Gln	Cys	Glu	Asn	Ser	Ala	Asp	Glu	Pro	Gln	Cys	Leu	Leu	Leu	Leu
			100				105					110		
Asp	Ala	Phe	Gly	Leu	Leu	Glu	Ser	Arg	Leu	Asp	Pro	Tyr	Leu	Arg
			115				120					125		Ser
Leu	Glu	Leu	Leu	Glu	Lys	Trp	Thr	Arg	Leu	Gly	Leu	Leu	Met	Gly
														Thr

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165	170	175			
Tyr Gly Cys Phe Leu Arg Val	Tyr Met Gln Ser Lys Arg	Lys Gly Glu			
180	185	190			
Gly Gly Thr Asp Pro Glu Leu	Glu Gly Glu Leu Asp Ser Arg	Tyr Ala			
195	200	205			
Arg Arg Arg Tyr Tyr Arg Leu	Leu Gln Ser Pro Leu Cys Ala Gly	Cys			
210	215	220			
Ser Ser Asp Lys Gln Gln Cys	Trp Cys Arg Gln Ala Leu Glu Gln	Phe			
225	230	235	240		
His Gln Leu Ser Gln Val Leu	His Arg Leu Ser Leu Leu Glu Arg	Val			
245	250	255			
Ser Ala Glu Ala Val Thr Thr	Thr Leu His Gln Val Thr Arg	Glu Arg			
260	265	270			
Met Glu Asp Arg Cys Arg Gly	Glu Tyr Glu Arg Ser Phe Leu Arg	Glu			
275	280	285			
Phe His Arg Trp Ile Glu Arg	Val Val Gly Trp Leu Gly Lys Val	Phe			
290	295	300			
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325	330	335			
Ala Ser Leu Arg Ile Glu Glu	Leu Phe Ser Ile Val Arg Asp	Phe Pro			
340	345	350			
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355	360	365			
Asp Gln Arg Gln Gln Leu Leu	Val Ser Leu Lys Ala Ala Leu Glu	Thr			
370	375	380			
Arg Leu Leu His Pro Gly Val	Asn Thr Cys Asp Ile Ile Thr Leu	Tyr			
385	390	395	400		
Ile Ser Ala Ile Lys Ala Leu	Arg Val Leu Asp Pro Ser Met Val	Ile			
405	410	415			
Leu Glu Val Ala Cys Glu Pro	Ile Arg Arg Tyr Leu Arg Thr Arg	Glu			
420	425	430			
Asp Thr Val Arg Gln Ile Val	Ala Gly Leu Thr Gly Asp Ser Asp	Gly			
435	440	445			
Thr Gly Asp Leu Ala Val Glu	Leu Ser Lys Thr Asp Pro Ala Ser	Leu			
450	455	460			
Glu Thr Gly Gln Asp Ser Glu	Asp Asp Ser Gly Glu Pro Glu Asp	Trp			
465	470	475	480		
Val Pro Asp Pro Val Asp Ala	Asp Pro Gly Lys Ser Ser Ser Lys	Arg			
485	490	495			
Arg Ser Ser Asp Ile Ile Ser	Leu Leu Val Ser Ile Tyr Gly Ser	Lys			
500	505	510			
Asp Leu Phe Ile Asn Glu Tyr	Arg Ser Leu Leu Ala Asp Arg	Leu Leu			
515	520	525			
His Gln Phe Ser Phe Ser Pro	Glu Arg Glu Ile Arg Asn Val Glu	Leu			
530	535	540			
Leu Lys Leu Arg Phe Gly Glu	Ala Pro Met His Phe Cys Glu Val	Met			
545	550	555	560		
Leu Lys Asp Met Ala Asp Ser	Arg Arg Ile Asn Ala Asn Ile Arg	Glu			

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Lys	Lys	Tyr	Glu	Gln	Leu	Lys	Ala	Met	Arg	Thr	Leu	Ser	Trp	Lys	His												
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Thr	Leu	Gly	Leu	Val	Thr	Met	Asp	Val	Glu	Leu	Ala	Asp	Arg	Thr	Leu												
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Ser	Val	Ala	Val	Thr	Pro	Val	Gln	Ala	Val	Ile	Leu	Leu	Tyr	Phe	Gln												
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Asp	Gln	Ala	Ser	Trp	Thr	Leu	Glu	Glu	Leu	Ser	Lys	Ala	Val	Lys	Met												
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Pro	Val	Ala	Leu	Leu	Arg	Arg	Arg	Met	Ser	Val	Trp	Leu	Gln	Gln	Gly												
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Val	Leu	Arg	Glu	Xaa	Ser	Pro	Pro	Ala	Pro	Ser	Leu	Ser	Leu	Arg	Arg												
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Leu	Leu	Leu	Phe	Trp	Thr	Tyr	Ile	Gln	Ala	Met	Leu	Thr	Asn	Leu	Glu												
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Thr	Gly	Pro	Ala	Leu	Ala	Glu	Ile	Asp	Leu	Gln	Glu	Leu	Gln	Gly	Tyr												
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Leu	Gln	Lys	Lys	Val	Arg	Asp	Gln	Gln	Leu	Val	Tyr	Ser	Ala	Gly	Val												
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<212> DNA
<213> Homo sapiens
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<210> 3878

<211> 370

<212> PRT

<213> Homo sapiens

<400> 3878

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			20					25					30		
His	Ala	Lys	Lys	Ala	Asn	Gly	Pro	Asn	Tyr	Ile	Gln	Pro	Gln	Lys	Arg
		35					40					45			
Gln	Thr	Thr	Phe	Glu	Ser	Gln	Asp	Arg	Lys	Ala	Val	Ser	Pro	Ser	Ser
	50					55				60					
Ser	Glu	Lys	Arg	Ser	Lys	Asn	Pro	Ile	Ser	Arg	Pro	Leu	Glu	Gly	Lys
65					70					75				80	
Lys	Ser	Leu	Ser	Leu	Ser	Ala	Lys	Thr	His	Asn	Ile	Gly	Phe	Asp	Lys
			85					90					95		
Asp	Ser	Cys	His	Ser	Thr	Thr	Lys	Thr	Glu	Ala	Ser	Gln	Glu	Glu	Arg
		100						105					110		
Ser	Asp	Ser	Ser	Gly	Leu	Thr	Ser	Leu	Lys	Lys	Ser	Pro	Lys	Val	Ser
	115						120					125			
Ser	Lys	Asp	Thr	Arg	Glu	Ile	Lys	Thr	Asp	Phe	Ser	Leu	Ser	Ile	Ser
	130					135				140					
Asn	Ser	Ser	Asp	Val	Ser	Ala	Lys	Asp	Lys	His	Ala	Glu	Asp	Asn	Glu
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Lys	Arg	Leu	Ala	Ala	Leu	Glu	Ala	Arg	Gln	Lys	Ala	Lys	Glu	Val	Gln
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<212> DNA
<213> Homo sapiens
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 <211> 1393
 <212> DNA
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<211> 277

<212> PRT

<213> Homo sapiens

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<211> 943

<212> DNA

<213> Homo sapiens

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<211> 1230

<212> PRT

<213> Homo sapiens

<400> 3888

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Glu	Leu	Gln	Lys	Asp	Ser	Ile	Lys	Leu	Asp	Asp	Asp	Ser	Glu	Arg	Lys
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  820              825              830
Ser Ile Arg Leu Leu Ala Leu Leu Ser Leu Gly Glu Val Gly His His
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Phe Ser Ser Pro Ser Glu Glu Val Lys Ser Ala Ala Ser Tyr Ala Leu
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Gln Glu Ile Thr Ser Gln Pro Lys Arg Gln Tyr Leu Leu Leu His Ser
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Leu Lys Glu Ile Ile Ser Ser Ala Ser Val Val Gly Leu Lys Pro Tyr
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Val Glu Asn Ile Trp Ala Leu Leu Lys His Cys Glu Cys Ala Glu
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 1075 1080 1085
 Met Tyr Thr Leu Leu Asp Ser Cys Leu Asp Arg Leu Asp Ile Phe Glu
 1090 1095 1100
 Phe Leu Asn His Val Glu Asp Gly Leu Lys Asp His Tyr Asp Ile Lys
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 1125 1130 1135
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<211> 556

<212> DNA

<213> Homo sapiens

<400> 3889

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<211> 101
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 <213> Homo sapiens

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 35 40 45
 Arg Lys Val Val Asp Pro Glu Thr Gly Arg Thr Arg Leu Ile Lys Gly
 50 55 60
 Asp Gly Glu Val Leu Glu Glu Ile Val Thr Lys Glu Arg His Arg Glu
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<210> 3892

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3892

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		20						25					30		
Ser	Gly	Leu	Phe	Ala	Leu	Cys	Thr	Leu	Asp	Gly	Thr	Leu	Lys	Leu	Met
		35					40					45			
Glu	Glu	Met	Glu	Glu	Ala	Asp	Lys	Leu	Leu	Trp	Ser	Val	Gln	Val	Asp
	50					55					60				
His	Gln	Leu	Phe	Ala	Leu	Glu	Lys	Leu	Asp	Val	Thr	Gly	Asn	Gly	His
65					70					75					80
Glu	Glu	Val	Val	Ala	Cys	Ala	Trp	Asp	Gly	Gln	Thr	Tyr	Ile	Ile	Asp
				85					90					95	
His	Asn	Arg	Thr	Val	Val	Arg	Phe	Gln	Val	Asp	Glu	Asn	Ile	Arg	Ala
			100					105					110		
Phe	Cys	Ala	Gly	Leu	Tyr	Ala	Cys	Lys	Glu	Gly	Arg	Asn	Ser	Pro	Cys
		115					120					125			
Leu	Val	Tyr	Val	Thr	Phe	Asn	Gln	Lys	Ile	Tyr	Val	Tyr	Trp	Glu	Val

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 <211> 1591
 <212> DNA
 <213> Homo sapiens

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<210> 3894

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3894

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Gly	Glu	Ser	Phe	Val	Met	Tyr	Tyr	Lys	Ser	Lys	Glu	Asn	Cys	Val	Val	35	40	45	
Asp	Asn	Ile	Lys	Val	Cys	Ser	Asn	Asp	Thr	Gly	Ser	Gly	Lys	Phe	Lys	50	55	60	
Cys	Val	Cys	Ile	Thr	Met	Arg	Val	Pro	Arg	Asn	Pro	Thr	Ile	Gly	Asp	65	70	75	80
Lys	Phe	Ala	Ser	Arg	His	Gly	Gln	Lys	Gly	Ile	Leu	Ser	Arg	Leu	Trp	85	90	95	
Pro	Ala	Glu	Asp	Met	Pro	Phe	Thr	Glu	Ser	Gly	Met	Val	Pro	Asp	Ile	100	105	110	
Leu	Phe	Asn	Pro	His	Gly	Phe	Pro	Ser	Arg	Met	Thr	Ile	Gly	Met	Leu	115	120	125	
Ile	Glu	Ser	Met	Ala	Gly	Lys	Ser	Ala	Ala	Leu	His	Gly	Leu	Cys	His	130	135	140	
Asp	Ala	Thr	Pro	Phe	Ile	Phe	Ser	Glu	Glu	Asn	Ser	Ala	Leu	Glu	Tyr	145	150	155	160
Phe	Gly	Glu	Met	Leu	Lys	Ala	Ala	Gly	Tyr	Asn	Phe	Tyr	Gly	Thr	Glu	165	170	175	
Arg	Leu	Tyr	Ser	Gly	Ile	Ser	Gly	Leu	Glu	Leu	Glu	Ala	Asp	Ile	Phe	180	185	190	
Ile	Gly	Val	Val	Tyr	Tyr	Gln	Arg	Leu	Arg	His	Met	Val	Ser	Asp	Lys	195	200	205	
Phe	Gln	Val	Arg	Thr	Thr	Gly	Ala	Arg	Asp	Arg	Val	Thr	Asn	Gln	Pro	210	215	220	
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Arg	Asp	Ala	Leu	Leu	Ala	His	Gly	Thr	Ser	Phe	Leu	Leu	His	Asp	Arg	245	250	255	
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<210> 3896

<211> 346

<212> PRT

<213> Homo sapiens

<400> 3896

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			20					25					30		
Pro	Glu	Asp	Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	Pro	Ser
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Ile	Glu	Ser	Thr	Ser	Pro	Ile	Ser	Arg	Thr	Asp	Glu	Ile	Arg	Lys	Asn
	50					55				60					
Thr	Tyr	Arg	Thr	Leu	Asp	Ser	Leu	Glu	Gln	Thr	Ile	Lys	Gln	Leu	Glu
65					70				75					80	
Asn	Thr	Ile	Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys
				85					90					95	
Ser	Ser	Asn	Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	Ile	Ala	Gln	Glu
		100						105					110		
Ala	Ser	Pro	Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu
		115					120					125			
Glu	Pro	Pro	Thr	Ser	Ile	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly
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Ala	Pro	Gln	Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg
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Pro	Gly	Thr	Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro
				165					170					175	
Arg	Gln	Tyr	Arg	Gln	Ala	Asn	Gly	Ser	Ala	Lys	Lys	Ser	Gly	Gly	Asp
		180					185						190		
Phe	Lys	Pro	Thr	Ser	Pro	Ser	Leu	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Leu
	195						200					205			
Ser	Pro	Ser	Ser	Gly	Lys	Ser	Ser	Ser	Leu	Pro	Ser	Ser	Ser	Gly	Asp
	210					215					220				
Ser	Ser	Asn	Leu	Pro	Asn	Pro	Pro	Ala	Thr	Lys	Pro	Ser	Ile	Ala	Ser
225					230					235					240
Asn	Pro	Leu	Ser	Pro	Gln	Thr	Gly	Pro	Pro	Ala	His	Ser	Ala	Ser	Leu
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Ile	Pro	Ser	Val	Ser	Asn	Gly	Ser	Leu	Lys	Phe	Gln	Ser	Leu	Thr	His
			260					265					270		
Thr	Gly	Lys	Gly	His	His	Leu	Ser	Phe	Ser	Pro	Gln	Ser	Gln	Asn	Gly
	275						280					285			
Arg	Ala	Pro	Pro	Pro	Leu	Ser	Phe	Ser	Ser	Ser	Pro	Pro	Ser	Pro	Ala
	290					295					300				
Ser	Ser	Val	Ser	Leu	Asn	Gln	Gly	Ala	Lys	Gly	Thr	Arg	Thr	Ile	His
305					310					315				320	
Thr	Pro	Ser	Leu	Thr	Ser	Tyr	Lys	Ala	Gln	Asn	Gly	Ser	Ser	Ser	Lys
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340

345

<210> 3897
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 3897
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 366

<210> 3898
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 3898
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 His Pro Arg Phe Val His Glu Trp Lys Ala Met Leu Thr Ala Ala Gln
 35 40 45
 Cys Val Gln Asp Val Ser Glu Thr Pro Val Pro Leu Pro Val Pro Leu
 50 55 60
 Ser Val Pro Leu Ser Thr Ser Val Thr Ser Ser Leu Arg Gly Ser His
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 Pro Thr Leu Cys His Cys His Ile Phe Leu Cys Ala Gln Pro Leu Pro
 85 90 95
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<210> 3899
 <211> 1092
 <212> DNA
 <213> Homo sapiens

<400> 3899
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 120

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 300
 ctgacggagc agtaccacaca aggcctgggc cccacgggtgc ccgagctggg gactngaggg
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<210> 3900

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3900

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		20						25					30		
Gly	Arg	Ser	Gly	Leu	Glu	Pro	Gly	Thr	Phe	Arg	Lys	Met	Ala	Ala	Ala
		35					40					45			
Arg	Pro	Ser	Leu	Gly	Arg	Val	Leu	Pro	Gly	Ser	Ser	Val	Leu	Phe	Leu
		50				55					60				
Cys	Asp	Met	Gln	Glu	Lys	Phe	Arg	His	Asn	Ile	Ala	Tyr	Phe	Pro	Gln
65				70					75					80	
Ile	Val	Ser	Val	Ala	Ala	Arg	Met	Leu	Lys	Val	Ala	Arg	Leu	Leu	Glu
			85					90					95		
Val	Pro	Val	Met	Leu	Thr	Glu	Gln	Tyr	Pro	Gln	Gly	Leu	Gly	Pro	Thr

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Val Pro Glu Leu Gly Thr Xaa Gly Pro Ser Ala Ala Gly Gln Asp Leu
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Leu Gln His Gly Ala Cys Leu Gln Gln Glu Leu Asp Ser Arg Pro Gln
      130              135              140
Leu Arg Ser Val Leu Leu Cys Gly Ile Glu Ala Gln Ala Cys Ile Leu
145              150              155              160
Asn Thr Thr Leu Asp Leu Leu Asp Arg Gly Leu Gln Val His Val Val
      165              170              175
Val Asp Ala Cys Ser Ser Arg Ser Gln Val Asp Arg Leu Val Ala Leu
      180              185              190
Ala Arg Met Arg Gln Ser Gly Ala Phe Leu Ser Thr Ser Glu Gly Leu
      195              200              205
Ile Leu Gln Leu Val Gly Asp Ala Val His Pro Gln Phe Lys Glu Ile
      210              215              220
Gln Lys Leu Ile Lys Glu Pro Ala Pro Asp Ser Gly Leu Leu Gly Leu
225              230              235              240
Phe Gln Gly Gln Asn Ser Leu Leu His
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<210> 3901

<211> 1287

<212> DNA

<213> Homo sapiens

<400> 3901

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840

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<210> 3902

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3902

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		20						25					30		
Trp	Ala	Ala	Thr	Thr	Ala	Arg	Asn	Ala	Leu	Val	Val	Ser	Phe	Ala	Ala
		35					40					45			
Leu	Val	Ala	Tyr	Ser	Phe	Glu	Val	Thr	Gly	Tyr	Gln	Pro	Phe	Ile	Leu
	50					55					60				
Thr	Gly	Glu	Thr	Ala	Glu	Gly	Leu	Pro	Pro	Val	Arg	Ile	Pro	Pro	Phe
65					70					75					80
Ser	Val	Thr	Thr	Ala	Asn	Gly	Thr	Ile	Ser	Phe	Thr	Glu	Met	Val	Gln
				85					90					95	
Asp	Met	Gly	Ala	Gly	Leu	Ala	Val	Val	Pro	Leu	Met	Gly	Leu	Leu	Glu
			100					105					110		
Ser	Ile	Ala	Val	Ala	Lys	Ala	Phe	Ala	Ser	Gln	Asn	Asn	Tyr	Arg	Ile
		115					120					125			
Asp	Ala	Asn	Gln	Glu	Leu	Leu	Ala	Ile	Gly	Leu	Thr	Asn	Met	Leu	Gly
	130					135					140				
Ser	Leu	Val	Ser	Ser	Tyr	Pro	Val	Thr	Gly	Ser	Phe	Gly	Arg	Thr	Ala
145					150					155					160
Val	Asn	Ala	Gln	Ser	Gly	Val	Cys	Thr	Pro	Ala	Gly	Gly	Leu	Val	Thr
			165						170					175	
Gly	Val	Leu	Val	Leu	Leu	Ser	Leu	Asp	Tyr	Leu	Thr	Ser	Leu	Phe	Tyr
		180						185					190		
Tyr	Ile	Pro	Lys	Ser	Ala	Leu	Ala	Ala	Val	Ile	Ile	Met	Ala	Val	Ala
		195					200					205			
Pro	Leu	Phe	Asp	Thr	Lys	Ile	Phe	Arg	Thr	Leu	Trp	Arg	Val	Lys	Arg
	210					215					220				
Leu	Asp	Leu	Leu	Pro	Leu	Cys	Val	Thr	Phe	Leu	Leu	Cys	Phe	Trp	Glu
225					230					235					240
Val	Gln	Tyr	Gly	Ile	Leu	Ala	Gly	Ala	Leu	Val	Ser	Leu	Leu	Met	Leu

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Leu His Ser Ala Ala Arg Pro Glu Thr Lys Val Ser Glu Gly Pro Val
                260                265                270
Leu Val Leu Gln Pro Ala Ser Gly Leu Ser Phe Pro Val Leu Cys Pro
                275                280                285
Pro Leu Pro Ala Val Gln Asp Pro Lys Thr Leu Ser Pro Thr Leu Ser
                290                295                300
Ser Pro Gln Gly Cys Arg His Leu
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<210> 3903

<211> 598

<212> DNA

<213> Homo sapiens

<400> 3903

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<210> 3904

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3904

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Val Ile Phe Met Ala Leu Asp Leu Ala Ser Leu Ala Ser Val Arg Ala
35          40          45
Phe Ala Thr Ala Phe Leu Ser Ser Glu Pro Arg Leu Asp Ile Leu Ile
50          55          60
His Asn Ala Gly Ile Ser Ser Cys Gly Arg Thr Arg Glu Ala Phe Asn
65          70          75          80
Leu Leu Leu Arg Val Asn His Ile Gly Pro Phe Leu Leu Thr His Leu

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400 3906																
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Leu	Glu	Gly	Thr	Ser	Glu	Met	Ala	Val	Thr	Phe	Asp	Lys	Val	Tyr	Val	
			20					25					30			
Asn	Ile	Gly	Gly	Asp	Phe	Asp	Val	Ala	Thr	Gly	Gln	Phe	Arg	Cys	Arg	
		35					40					45				
Val	Pro	Gly	Ala	Tyr	Phe	Phe	Ser	Phe	Thr	Ala	Gly	Lys	Ala	Pro	His	
	50					55					60					
Lys	Ser	Pro	Ser	Val	Met	Leu	Val	Arg	Asn	Arg	Asp	Glu	Val	Gln	Ala	
65					70					75				80		
Leu	Ala	Phe	Asp	Glu	Gln	Arg	Arg	Pro	Gly	Ala	Arg	Arg	Ala	Ala	Ser	

	85		90		95
Gln Ser Ala Met Leu Gln Leu Asp Tyr Gly Asp Thr Val Trp Leu Arg					
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Leu His Gly Ala Pro Gln Tyr Ala Leu Gly Ala					
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<210> 3907

<211> 4474

<212> DNA

<213> Homo sapiens

<400> 3907

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<400> 3912
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 35 40 45
 Val Ala Ala Glu Leu Asp Arg Glu Glu Val Asp Phe Tyr Ser Phe Gly
 50 55 60
 Val Glu Ala Arg Asp His Gly Thr Pro Ala Leu Thr Ala Ser Ala Ser
 65 70 75 80
 Val Ser Val Thr Val Leu Asp Val Asn Asp Asn Asn Pro Thr Phe Thr
 85 90 95
 Gln Pro Glu Tyr Thr Val Arg Leu Asn Glu Asp Ala Ala Val Gly Thr
 100 105 110
 Ser Val Val Thr Val Ser Ala Val Asp Arg Asp Ala His Ser Val Ile
 115 120 125
 Thr Tyr Gln Ile Thr Ser Gly Asn Thr Arg Asn Arg Phe Ser Ile Thr
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 Ser Gln Ser Gly Gly Gly Leu Val Ser Leu Ala Leu Pro Leu Asp Tyr
 145 150 155 160
 Lys Leu Glu Arg Gln Tyr Val Leu Ala Val Thr Ala Ser Asp Gly Thr
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 Arg Gln Asp Thr Ala Gln Ile Val Val Asn Val Thr Asp Ala Asn Thr
 180 185 190
 His Arg Pro Val Phe Gln Ser Ser His Tyr Thr Val Asn Val Asn Glu
 195 200 205
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 210 215 220
 Asp Thr Gly Glu Asn Ala Arg Ile Thr Tyr Phe Met Glu Asp Ser Ile
 225 230 235 240
 Pro Gln Phe Arg Ile Asp Ala Asp Thr Gly Ala Val Thr Thr Gln Ala
 245 250 255
 Glu Leu Asp Tyr Glu Asp Gln Val Ser Tyr Thr Leu Ala Ile Thr Ala

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Ile	Leu	Phe	Asn	Asn	Tyr	Val	Thr	Asn	Arg	Ser	Ser	Ser	Phe	Pro	Gly						
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Gly	Ala	Ile	Gly	Arg	Val	Pro	Ala	His	Asp	Pro	Asp	Ile	Ser	Asp	Ser						
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Asn Tyr Met Lys Cys Val Ser Val Leu Arg Phe Asp Ser Ser Ala Pro		720
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Gly Leu Arg Cys Arg Cys Pro Pro Gly Phe Thr Gly Asp Tyr Cys Glu		750
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Thr Glu Ile Asp Leu Cys Tyr Ser Arg Pro Cys Gly Ala Asn Gly Arg		765
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Val Thr Thr Arg Ser Phe Pro Ala His Ser Phe Ile Thr Phe Arg Gly		845
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Gly Val Pro Asp Leu Pro Glu Ser Phe Pro Val Arg Met Arg Gln Phe		1005
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Trp Gly Val Pro Ala Phe Ile Thr Gly Leu Ala Val Gly Leu Asp Pro		
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1680

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<210> 3916
 <211> 342
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Glu Lys Arg Gln Glu Gly Arg Ser Ser Thr Gln Thr Leu Glu Asp
 50 55 60
 Ser Trp Arg Tyr Glu Glu Thr Ser Glu Asn Glu Ala Val Ala Glu Glu
 65 70 75 80
 Glu Glu Glu Glu Val Glu Glu Glu Gly Glu Glu Asp Val Phe Thr Glu
 85 90 95
 Lys Ala Ser Pro Asp Met Asp Gly Tyr Pro Ala Leu Lys Val Asp Lys
 100 105 110
 Glu Thr Asn Thr Glu Thr Pro Ala Pro Ser Pro Thr Val Val Arg Pro
 115 120 125
 Lys Asp Arg Arg Val Gly Thr Pro Ser Gln Gly Pro Phe Leu Arg Gly
 130 135 140
 Ser Thr Ile Ile Arg Ser Lys Thr Phe Ser Pro Gly Pro Gln Ser Gln
 145 150 155 160
 Tyr Val Cys Arg Leu Asn Arg Ser Asp Ser Asp Ser Ser Thr Leu Ser
 165 170 175
 Lys Lys Pro Pro Phe Val Arg Asn Ser Leu Glu Arg Arg Ser Val Arg
 180 185 190
 Met Lys Arg Pro Ser Pro Pro Pro Gln Pro Ser Ser Val Lys Ser Leu
 195 200 205
 Arg Ser Glu Arg Leu Ile Arg Thr Ser Leu Asp Leu Glu Leu Asp Leu
 210 215 220
 Gln Ala Thr Arg Thr Trp His Ser Gln Leu Thr Gln Glu Ile Ser Val
 225 230 235 240
 Leu Lys Glu Leu Lys Glu Gln Leu Glu Gln Ala Lys Ser His Gly Glu
 245 250 255
 Lys Glu Leu Pro Gln Trp Leu Arg Glu Asp Glu Arg Phe Arg Leu Leu
 260 265 270
 Leu Arg Met Leu Glu Lys Arg Gln Met Asp Arg Ala Glu His Lys Gly
 275 280 285
 Glu Leu Gln Thr Asp Lys Met Met Arg Ala Ala Ala Lys Asp Val His
 290 295 300
 Arg Leu Arg Gly Gln Ser Cys Lys Glu Pro Pro Glu Val Gln Ser Phe
 305 310 315 320
 Arg Glu Lys Met Ala Phe Phe Thr Arg Pro Arg Met Asn Ile Pro Ala

325
Leu Ser Ala Asp Asp Val
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330

335

<210> 3917

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3917

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420
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480
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<210> 3918

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3918

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20           25           30
Pro Asp Asn Glu Asp Ser Gly Asp Ser Lys Asp Ile Arg Leu Thr Leu
35           40           45
Met Glu Glu Val Leu Leu Leu Gly Leu Lys Asp Lys Glu Gly Tyr Thr
50           55           60
Ser Phe Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Gly Ile Leu
65           70           75           80
Ile Glu Leu Ala Met Arg Gly Arg Ile Tyr Leu Glu Pro Pro Thr Met
85           90           95
Arg Lys Lys Arg Leu Leu Asp Arg Lys Val Leu Leu Lys Ser Asp Ser
100          105          110
Pro Thr Gly Asp Val Leu Leu Asp Glu Thr Leu Lys His Ile Lys Ala
115          120          125
Thr Glu Pro Thr Glu Thr Val Gln Thr Trp Ile Glu Leu Leu Thr Gly

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 145 150

<210> 3919
 <211> 1278
 <212> DNA
 <213> Homo sapiens

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 180
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 780
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 1020
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 1260
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 1278

<210> 3920
 <211> 426
 <212> PRT
 <213> Homo sapiens

<400> 3920
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 20 25 30
 Leu Thr Gln Glu Arg Asp Tyr Leu Gln Ala Gln His Pro Pro Ser Pro
 35 40 45
 Ile Lys Ser Ser Ser Ala Asp Ser Thr Pro Ser Pro Thr Ser Ser Leu
 50 55 60
 Ser Ser Glu Asp Lys Gln His Leu Ala Val Glu Leu Ala Asp Thr Lys
 65 70 75 80
 Ala Arg Leu Arg Arg Val Arg Gln Glu Leu Glu Asp Lys Thr Glu Gln
 85 90 95
 Leu Val Asp Thr Arg His Glu Val Asp Gln Leu Val Leu Glu Leu Gln
 100 105 110
 Lys Val Lys Gln Glu Asn Ile Gln Leu Ala Ala Asp Ala Arg Ser Ala
 115 120 125
 Arg Ala Tyr Arg Asp Glu Leu Asp Ser Leu Arg Glu Lys Ala Asn Arg
 130 135 140
 Val Glu Arg Leu Glu Leu Glu Leu Thr Arg Cys Lys Glu Lys Leu His
 145 150 155 160
 Asp Val Asp Phe Tyr Lys Ala Arg Met Glu Glu Leu Arg Glu Asp Asn
 165 170 175
 Ile Ile Leu Ile Glu Thr Lys Ala Met Leu Glu Glu Gln Leu Thr Ala
 180 185 190
 Ala Arg Ala Arg Gly Asp Lys Val His Glu Leu Glu Lys Glu Asn Leu
 195 200 205
 Gln Leu Lys Ser Lys Leu His Asp Leu Glu Leu Asp Arg Asp Thr Asp
 210 215 220
 Lys Lys Arg Ile Glu Glu Leu Leu Glu Glu Asn Met Val Leu Glu Ile
 225 230 235 240
 Ala Gln Lys Gln Ser Met Asn Glu Ser Ala His Leu Gly Trp Glu Leu
 245 250 255
 Glu Gln Leu Ser Lys Asn Ala Asp Leu Ser Asp Ala Ser Arg Lys Ser
 260 265 270
 Phe Val Phe Glu Leu Asn Glu Cys Ala Ser Ser Arg Ile Leu Lys Leu
 275 280 285
 Glu Lys Glu Asn Gln Ser Leu Gln Ser Thr Ile Gln Gly Leu Arg Asp
 290 295 300
 Ala Ser Leu Val Leu Glu Glu Ser Gly Leu Lys Cys Gly Glu Leu Glu
 305 310 315 320
 Lys Glu Asn His Gln Leu Ser Lys Lys Ile Glu Lys Leu Gln Thr Gln
 325 330 335
 Leu Glu Arg Glu Lys Gln Ser Asn Gln Asp Leu Glu Thr Leu Ser Glu
 340 345 350
 Glu Leu Ile Arg Glu Lys Glu Gln Leu Gln Ser Asp Met Glu Thr Leu
 355 360 365
 Lys Ala Asp Lys Ala Arg Gln Ile Lys Asp Leu Glu Gln Glu Lys Asp

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      370              375              380
His Leu Asn Arg Ala Met Trp Ser Leu Arg Glu Arg Ser Gln Val Ser
385              390              395              400
Ser Glu Ala Arg Met Lys Asp Val Glu Lys Glu Asn Lys Ala Leu His
      405              410              415
Gln Thr Val Thr Glu Ala Asn Gly Lys Leu
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<210> 3921
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 3921
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 180
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 300
 ctccagccct tggagcttag gcagtgtagt gttaggatga ttattggatt tctccacag
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 413

<210> 3922
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 3922
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 20 25 30
 Leu Leu Ala Ser Leu Val Thr Phe Ile His Ala Gly Pro Cys Phe Leu
 35 40 45
 Asp Ser Val Gly Pro Ile Pro Ala Pro Arg Gly Asp Gly Cys Cys Arg
 50 55 60
 Asp Val Gln Ala Val Glu Gly Ser Arg Glu Trp Ala Trp Arg Ser Ala
 65 70 75 80
 Ser Leu Ala Pro Leu Leu Asp Ala Phe Leu Gln Pro Leu Glu Leu Arg
 85 90 95
 Gln Cys Ser Val Arg Met Ile Ile Gly Phe Pro Pro Gln Phe Leu Ala
 100 105 110
 His Ser Phe Val Ala Leu Val Thr Ala Phe Cys Asp Asn Ile
 115 120 125

<210> 3923
 <211> 820

<212> DNA

<213> Homo sapiens

<400> 3923

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120
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180
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360
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420
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660
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720
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<210> 3924

<211> 250

<212> PRT

<213> Homo sapiens

<400> 3924

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20     25     30
Ser Glu Tyr Thr Gly Pro Thr Ser Ala Asp Leu Asp His Phe Pro Ser
35     40     45
Val Ser Gln Thr Lys Ala Glu Gln Asp Ser Asp Asn Lys Ser Ser Thr
50     55     60
Glu Ile Pro Leu Glu Thr Cys Cys Ser Ser Glu Leu Lys Gly Gly Gly
65     70     75     80
Ser Gly Thr Ser Leu Glu Arg Glu Gln Phe Glu Gly Leu Gly Ser Thr
85     90     95
Pro Asp Ala Lys Leu Asp Lys Thr Cys Ile Ser Arg Ala Met Lys Ile
100    105    110
Thr Thr Val Asn Ser Val Leu Pro Gln Asn Ser Val Leu Gly Gly Val

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<210> 3925
<211> 3296
<212> DNA
<213> Homo sapiens
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900

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2520

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<210> 3926

<211> 683

<212> PRT

<213> Homo sapiens

<400> 3926

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			20					25					30		
Thr	Arg	Pro	Gln	Pro	Val	Leu	Pro	Leu	Leu	Asp	Leu	Asn	Asn	Gln	Ser
			35				40					45			
Val	Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn
	50					55				60					
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu	Val
65					70				75					80	
Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu	Gly	Tyr
			85					90						95	
Arg	Lys	Pro	Asn	Gln	Pro	Tyr	Arg	Trp	Leu	Ser	Tyr	Lys	Gln	Val	Ser
			100					105					110		
Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His	Lys	Gly	Tyr	Lys
		115				120						125			
Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala	Gln	Asn	Arg	Pro	Glu
	130					135					140				
Trp	Ile	Ile	Ser	Glu	Leu	Ala	Cys	Tyr	Thr	Tyr	Ser	Met	Val	Ala	Val
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Pro	Leu	Tyr	Asp	Thr	Leu	Gly	Pro	Glu	Ala	Ile	Val	His	Ile	Val	Asn

3088

	595					600						605							
Leu	Cys	Gln	Asn	Gln	Val	Val	Arg	Glu	Ala	Ile	Leu	Glu	Asp	Leu	Gln				
	610						615					620							
Lys	Ile	Gly	Lys	Glu	Ser	Gly	Leu	Lys	Thr	Phe	Glu	Gln	Val	Lys	Ala				
625						630					635				640				
Ile	Phe	Leu	His	Pro	Glu	Pro	Phe	Ser	Ile	Glu	Asn	Gly	Leu	Leu	Thr				
				645						650				655					
Pro	Thr	Leu	Lys	Ala	Lys	Arg	Gly	Glu	Leu	Ser	Lys	Tyr	Phe	Arg	Thr				
			660					665					670						
Gln	Ile	Asp	Ser	Leu	Tyr	Glu	His	Ile	Gln	Asp									
	675						680												

<210> 3927

<211> 3197

<212> DNA

<213> Homo sapiens

<400> 3927

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120
aggaaaagaa gaaatgggca caacagggtgg agaaggaaag ggagctagag cttcgagaca
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240
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300
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420
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540
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720
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780
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<212> DNA

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<212> PRT

<213> Homo sapiens

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Ser	Ser	Ser	Asn	Lys	Ser	Pro	Ser	Ser	Ala	Trp	Ser	Ser	Ser	Ser	Trp
	50					55				60					
His	Gly	Arg	Ile	Lys	Gly	Gly	Met	Lys	Gly	Phe	Gln	Ser	Phe	Met	Val
65				70					75					80	
Ser	Asp	Ser	Asn	Met	Ser	Phe	Val	Glu	Phe	Val	Glu	Leu	Phe	Lys	Ser
			85					90						95	
Phe	Ser	Val	Arg	Ser	Arg	Lys	Asp	Leu	Lys	Asp	Leu	Phe	Asp	Xaa	Leu

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Cys Ser Ala Leu Gln Pro Xaa Leu Ala Pro Ser Gln Pro His Ser Thr					
	115		120		125
Pro Thr					
130					

<210> 3935
 <211> 1103
 <212> DNA
 <213> Homo sapiens

<400> 3935
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 120
 aggacacagc agcggccacc atggccacgc ctgggctcca gcagcatcag cagccccag
 180
 gaccggggag gcacagggtg cccccaccac ccggaggagc agctcctgcc cctgtccggg
 240
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 300
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 360
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 420
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 480
 caccgggcct gcagcaccta ccgaaccatc tataggaccg cctaccgccg cagccctggg
 540
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 600
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 660
 cagcctggcc gctgccgctg ccctgcagga tggcgggggtg acacttgcca gtcagatgtg
 720
 gatgaatgca gtgctaggag gggcggtgtg cccagcgct gcgtcaacac cgccggcagt
 780
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 840
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 960
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<210> 3936
 <211> 265
 <212> PRT

<213> Homo sapiens

<400> 3936

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          20           25           30
Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val
          35           40           45
Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr
          50           55           60
Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala
65           70           75           80
Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser
          85           90           95
Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
          100          105          110
Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly
          115          120          125
Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg
          130          135          140
Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp
145          150          155          160
Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys
          165          170          175
Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Lys
          180          185          190
Gln Pro Trp Leu Cys Leu Ala Trp Gly Gly Gly Gln Ala Val Asp Ile
          195          200          205
Ala Val Trp Leu Leu Gly Met Val Gly Gly Thr Gly Ile Trp Ala Glu
          210          215          220
Gly Gly Gly Asp Ser Leu Ser Arg Glu Gly Gly Trp Gly Gly Arg Ile
225          230          235          240
Gly Gly Phe Pro Arg Thr Gly Gly Arg Leu Pro Gly Ala Ser Tyr Gln
          245          250          255
Pro Arg Arg Gln Lys Cys Pro Val Pro
          260          265

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<210> 3937

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3937

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240
cccgggagag cggcggaagc aggaaatgct aaaggagatg ccactgcagg acccaaggag
300

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 420
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<210> 3938
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 3938
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 20 25 30
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 35 40 45
 Arg Ala Ala Glu Ala Gly Asn Ala Lys Gly Asp Ala Thr Ala Gly Pro
 50 55 60
 Lys Glu Gln Gly Gly Gly Gly Gln Asp Pro Ala Ala Ile Ala Gly His
 65 70 75 80
 Ser Ala Gly Gly Ser Asp His Ala Gly Glu Arg Gly Leu Xaa Gly Arg
 85 90 95
 Thr Gly Trp Leu Ala Ala Lys Ala Ala Pro Ala Gly Gly His Arg Glu
 100 105 110
 Thr Gly Leu Ala Ser Val Gly Ala Gly Pro Trp Leu Gly Arg Arg Asn
 115 120 125
 Pro Arg Gln Pro Phe Ser Phe Val Gly Pro Ala Glu Ser Pro Asp Arg
 130 135 140
 Asp Thr Met Pro Gly Leu Ser Gly Val Leu
 145 150

<210> 3939
 <211> 490
 <212> DNA
 <213> Homo sapiens

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 120

ctgaagactg tgaaagaaag ggcaacagac agcgagggag gaagagacag gctggagccc
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 240
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 300
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<210> 3940
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 3940
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 Arg Asp Arg Gln Trp Glu Ala Glu Leu Lys Thr Val Lys Glu Arg Ala
 35 40 45
 Thr Asp Ser Glu Gly Gly Arg Asp Arg Leu Glu Pro Phe Leu
 50 55 60

<210> 3941
 <211> 2077
 <212> DNA
 <213> Homo sapiens

<400> 3941
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 180
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 420
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 480
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720
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1380
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1920
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2077

<210> 3942

<211> 89
 <212> PRT
 <213> Homo sapiens

<400> 3942
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 20 25 30
 Gln Glu Arg Leu Arg Leu Thr Arg Gly Trp Ser Pro Gln Gly Gly Cys
 35 40 45
 Gly Ala Arg Ser Gln Ser Thr Pro Ser Ser Asp Thr Leu Pro Pro Ala
 50 55 60
 Leu Leu Gly Ser Pro Ala Ser Val Ser Gly Thr Gly Gly Thr Asp Met
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 Ser Ser Ala Asn Ala His Ser Ala Leu
 85

<210> 3943
 <211> 1524
 <212> DNA
 <213> Homo sapiens

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 120
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 240
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 360
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 420
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 720
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 780
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 aatttgctga acatctttat ctcaaattct ggaattgaaa aggcatttct atttgatgtg
 900

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 960
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 1020
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 1080
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 1200
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 1260
 aagaaaaaga gagccacccc taatgggacc cctagagtgc tgctgtaggt gaggtttcag
 1320
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 1380
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 1500
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 1524

<210> 3944

<211> 435

<212> PRT

<213> Homo sapiens

<400> 3944

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Arg	Leu	Gly	Pro	Thr	Pro	Gly	Pro	Pro	Pro	Ser	Pro	Gly	Arg	Pro	Ala
			20					25					30		
Val	Gly	Thr	Met	Ser	Gln	Val	Leu	Gly	Lys	Pro	Gln	Pro	Gln	Asp	Glu
			35				40					45			
Asp	Asp	Ala	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Leu	Val	Gly	Leu	Ala
			50				55				60				
Asp	Tyr	Gly	Asp	Gly	Pro	Asp	Ser	Ser	Asp	Ala	Asp	Pro	Asp	Ser	Gly
65					70					75				80	
Thr	Glu	Glu	Gly	Val	Leu	Asp	Phe	Ser	Asp	Pro	Phe	Ser	Thr	Glu	Val
				85					90					95	
Lys	Pro	Arg	Ile	Leu	Leu	Met	Gly	Leu	Arg	Arg	Ser	Gly	Lys	Ser	Ser
			100				105						110		
Ile	Gln	Lys	Val	Val	Phe	His	Lys	Met	Ser	Pro	Asn	Glu	Thr	Leu	Phe
			115				120					125			
Leu	Glu	Ser	Thr	Asn	Lys	Ile	Cys	Arg	Glu	Asp	Val	Ser	Asn	Ser	Ser
			130			135					140				
Phe	Val	Asn	Phe	Gln	Ile	Trp	Asp	Phe	Pro	Gly	Gln	Ile	Asp	Phe	Phe
145					150					155					160
Asp	Pro	Thr	Phe	Asp	Tyr	Glu	Met	Ile	Phe	Arg	Gly	Thr	Gly	Ala	Leu
				165					170					175	
Ile	Phe	Val	Ile	Asp	Ala	Gln	Asp	Asp	Tyr	Met	Glu	Ala	Leu	Thr	Arg
				180					185				190		
Leu	His	Ile	Thr	Val	Ser	Lys	Ala	Tyr	Lys	Val	Asn	Pro	Asp	Met	Asn

195	200	205
Phe Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp Asp His Lys		
210	215	220
Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp Asp Leu Ala		
225	230	235
Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu Thr Ser Ile		
	245	250
Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val Gln Lys Leu		
	260	265
Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile Phe Ile Ser		
	275	280
Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val Ser Lys Ile		
	290	295
Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr Tyr Glu Leu		
305	310	315
Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys Ile Tyr Gly		
	325	330
Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu Ser Thr Ala		
	340	345
Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys Glu Val Thr		
	355	360
Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser Phe Glu Arg		
	370	375
Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys Ala Ile His		
385	390	395
Glu Val Phe Glu Val Arg Met Lys Val Val Lys Ser Arg Lys Val Gln		
	405	410
Asn Arg Leu Gln Lys Lys Lys Arg Ala Thr Pro Asn Gly Thr Pro Arg		
	420	425
Val Leu Leu		430
435		

<210> 3945

<211> 696

<212> DNA

<213> Homo sapiens

<400> 3945

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 120
 cgggcgcgcc cagcagtagc accgcccgcg cccgcccctg gacacttgta agtttcgatt
 180
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 480

ctgcgataac ctgcatctct gcaaactcaa cttgctgggc cgggtgcaact attcgcagtc
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<210> 3946

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3946

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Gly	Ser	Ser	Gly	Gly	His	His	Arg	Ser	Gly	Asp	Pro	Gly	Leu	Ala	Ala
			20					25					30		
Gly	Leu	Gln	His	His	Lys	Ala	Val	Gly	Pro	Gly	His	Leu	Gln	His	Leu
			35				40					45			
Thr	Glu	Leu	Arg	Leu	Arg	Gln	Arg	Asp	Leu	Leu	Glu	Gln	Arg	Val	Gln
			50			55					60				
Gly	His	Ala	Ala	Pro	Val	Gly	Ala	Gln	Asp	Phe	Gly	Asp	Glu	Ala	Ala
65					70				75					80	
His	Leu	Arg	Val	Arg	His	Gly	Ala	Leu	Ala	Val	Leu	Ala	Leu	Pro	Arg
			85					90						95	
Arg	Gly	Thr	Arg	Phe	Arg	Gly	Asn	Arg	Lys	Ser	Lys	Leu	Thr	Ser	Val
			100				105						110		
Gln	Gly	Arg	Ala	Arg	Ala	Val	Leu	Leu	Leu	Gly	Ala	Pro	Gly	Val	Ser
			115			120						125			
Glu	Gly	Ala	Leu	Ser	Val	Ala	Val	Ser	Pro	Ala	Gln	Arg	Ser	Thr	Leu
			130			135					140				
Gly	Ser	Gln	Val	Lys	Arg	Leu	Asp	Leu	Thr	Asp	Arg	Val	Leu	Val	Ala
145					150				155						160
Gly	Leu	Gln	Pro	Ala											
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<210> 3947

<211> 400

<212> DNA

<213> Homo sapiens

<400> 3947

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 180
 gccagcgagc aggtaatcaa agacctaaag ggctcggact acagctgggtc ctaccagacc
 240
 ccaccctcat caccagcag ctccagctcc cggaagtcca gcatgtgcag tgccccccagc
 300

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<210> 3948
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 3948
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 20 25 30
 Thr Met Leu Gly Glu Ile Thr His Leu Gln Gly Ile Ile Asp Asp Leu
 35 40 45
 Val Val Leu Thr Ala Glu Pro His Lys Leu Pro Pro Ala Ser Glu Gln
 50 55 60
 Val Ile Lys Asp Leu Lys Gly Ser Asp Tyr Ser Trp Ser Tyr Gln Thr
 65 70 75 80
 Pro Pro Ser Ser Pro Ser Ser Ser Ser Ser Arg Lys Ser Ser Met Cys
 85 90 95
 Ser Ala Pro Ser Ser Ser Ser Ser Ala Lys Gly Gly Gly Ser Pro Met
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 Ala Trp Gly Cys Pro Asn Ile Leu Thr Gln Phe His Leu Ser Leu Pro
 115 120 125
 Gln Pro Gly Ala Ala
 130

<210> 3949
 <211> 1462
 <212> DNA
 <213> Homo sapiens

<400> 3949
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<210> 3950

<211> 351

<212> PRT

<213> Homo sapiens

<400> 3950

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		20					25					30			
Ala	Gln	Gln	Tyr	Glu	Ile	Phe	Ser	Arg	Ser	Leu	Arg	Lys	Asn	Arg	Glu
		35				40					45				
Leu	Phe	Val	His	Gly	Leu	Pro	Gly	Ser	Gly	Lys	Asn	Ile	Met	Ala	Met
	50				55					60					
Lys	Ile	Met	Glu	Lys	Ile	Arg	Asn	Val	Phe	His	Cys	Glu	Ala	His	Arg
65				70				75						80	
Ile	Leu	Tyr	Val	Cys	Glu	Asn	Gln	Pro	Leu	Arg	Asn	Phe	Ile	Ser	Asp
			85				90						95		
Arg	Asn	Ile	Cys	Arg	Ala	Glu	Thr	Arg	Glu	Thr	Phe	Leu	Arg	Glu	Lys
		100				105						110			
Phe	Glu	His	Ile	Gln	His	Ile	Val	Ile	Asp	Glu	Ala	Gln	Asn	Phe	Arg

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Thr Glu Asp Gly Asp Trp Tyr Gly Lys Ala Lys Ser Ile Thr Gln Arg		
130	135	140
Glu Lys Asp Cys Pro Gly Val Leu Trp Ile Phe Leu Asp Tyr Phe Gln		
145	150	155
Thr Ser His Leu Gly His Ser Gly Leu Pro Pro Leu Ser Asp Gln Tyr		
165	170	175
Pro Arg Glu Glu Leu Thr Arg Ile Val Arg Asn Ala Asp Glu Ile Ala		
180	185	190
Glu Tyr Leu Gln Lys Glu Met Gln Leu Ile Ile Glu Asn Pro Pro Ile		
195	200	205
Asn Ile Pro Thr Gly Cys Leu Glu Val Phe Pro Glu Ala Glu Trp Ser		
210	215	220
Gln Gly Val Gln Gly Thr Leu Arg Ile Lys Lys Tyr Leu Thr Val Glu		
225	230	235
Gln Ile Met Thr Cys Val Ala Asp Thr Cys Arg Arg Phe Phe Asp Arg		
245	250	255
Gly Tyr Ser Pro Lys Asp Val Ala Val Leu Val Ser Thr Ala Lys Glu		
260	265	270
Val Glu His Tyr Lys Tyr Glu Leu Leu Lys Ala Met Arg Lys Lys Arg		
275	280	285
Val Val Gln Leu Ser Asp Ala Cys Asp Met Leu Gly Asp His Ile Val		
290	295	300
Leu Asp Ser Val Arg Arg Phe Ser Gly Leu Glu Arg Ser Ile Val Phe		
305	310	315
Gly Ile His Pro Arg Thr Ala Asp Pro Ala Ile Leu Pro Asn Ile Leu		
325	330	335
Ile Cys Leu Ala Ser Arg Ala Lys Gln His Leu Tyr Ile Phe Leu		
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<210> 3951
 <211> 1012
 <212> DNA
 <213> Homo sapiens

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<210> 3952

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3952

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			20					25					30		
Arg	Arg	Lys	Leu	Asp	Pro	Gly	Lys	Met	His	Ala	Lys	Ile	Trp	Leu	Met
		35					40					45			
Lys	Thr	Ser	Leu	Arg	Ser	Gly	Arg	Ala	Ala	Leu	Arg	Glu	Leu	Arg	Ser
	50				55					60					
Arg	Glu	Asn	Phe	Leu	Ser	Lys	Leu	Asn	Arg	Glu	Leu	Ile	Glu	Thr	Ile
65				70					75						80
Gln	Glu	Met	Glu	Asn	Ser	Thr	Thr	Leu	His	Val	Arg	Ala	Leu	Leu	Gln
			85					90						95	
Gln	Gln	Asp	Thr	Leu	Ala	Thr	Ile	Ile	Asp	Ile	Leu	Glu	Tyr	Ser	Asn
		100						105					110		
Lys	Lys	Arg	Leu	Gln	Gln	Leu	Lys	Ser	Glu	Leu	Gln	Glu	Trp	Glu	Glu
		115					120					125			
Lys	Lys	Lys	Cys	Lys	Met	Ser	Tyr	Leu	Glu	Gln	Gln	Ala	Glu	Gln	Leu
		130				135					140				
Asn	Ala	Lys	Ile	Glu	Lys	Thr	Gln	Glu	Glu	Val	Asn	Phe	Leu	Ser	Thr
145					150					155					160
Tyr	Met	Asp	His	Glu	Tyr	Ser	Ile	Lys	Ser	Val	Gln	Ile	Ser	Thr	Leu
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Met	Arg	His	Cys	Ser	Arg	Leu	Arg	Thr	Ala	Ser	Arg				
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<210> 3953

<211> 2900

<212> DNA

<213> Homo sapiens

<400> 3953

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<210> 3954

<211> 627

<212> PRT

<213> Homo sapiens

<400> 3954

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Ser	Glu	Ala	Ser	Cys	Ala	Tyr	Val	Leu	Ile	Val	Thr	Ala	Val	Tyr	Trp
		35					40				45				
Val	Ser	Glu	Ala	Val	Pro	Leu	Gly	Ala	Ala	Ala	Leu	Val	Pro	Ala	Phe
		50				55					60				
Leu	Tyr	Pro	Phe	Phe	Gly	Val	Leu	Arg	Ser	Asn	Glu	Val	Ala	Ala	Glu
65					70					75					80
Tyr	Phe	Lys	Asn	Thr	Thr	Leu	Leu	Leu	Val	Gly	Val	Ile	Cys	Val	Ala
			85						90					95	
Ala	Ala	Val	Glu	Lys	Trp	Asn	Leu	His	Lys	Arg	Ile	Ala	Leu	Arg	Met
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Val	Leu	Met	Ala	Gly	Ala	Lys	Pro	Gly	Met	Leu	Leu	Leu	Cys	Phe	Met
		115					120					125			
Cys	Cys	Thr	Thr	Leu	Leu	Ser	Met	Trp	Leu	Ser	Asn	Thr	Ser	Thr	Thr
		130				135					140				
Ala	Met	Val	Met	Pro	Ile	Val	Glu	Ala	Val	Leu	Gln	Glu	Leu	Val	Ser
145					150					155					160
Ala	Glu	Asp	Glu	Gln	Leu	Val	Ala	Gly	Asn	Ser	Asn	Thr	Glu	Glu	Ala
			165					170						175	
Glu	Pro	Ile	Ser	Leu	Asp	Val	Lys	Asn	Ser	Gln	Pro	Ser	Leu	Glu	Leu
		180						185					190		
Ile	Phe	Val	Asn	Glu	Asp	Arg	Ser	Asn	Ala	Asp	Leu	Thr	Thr	Leu	Met
		195					200					205			
His	Asn	Glu	Asn	Leu	Asn	Gly	Val	Pro	Ser	Ile	Thr	Asn	Pro	Ile	Lys
		210				215					220				
Thr	Ala	Asn	Gln	His	Gln	Gly	Lys	Lys	Gln	His	Pro	Ser	Gln	Glu	Lys
225					230					235					240
Pro	Gln	Val	Leu	Thr	Pro	Ser	Pro	Arg	Lys	Gln	Lys	Leu	Asn	Arg	Lys
			245					250						255	
Tyr	Arg	Ser	His	Asp	Gln	Met	Ile	Cys	Lys	Cys	Leu	Ser	Leu	Ser	
		260					265					270			
Ile	Ser	Tyr	Ser	Ala	Thr	Ile	Gly	Leu	Thr	Thr	Ile	Ile	Gly	Thr	
		275					280				285				
Ser	Thr	Ser	Leu	Ile	Phe	Leu	Glu	His	Phe	Asn	Asn	Gln	Tyr	Pro	Ala
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Ala	Glu	Val	Val	Asn	Phe	Gly	Thr	Trp	Phe	Leu	Phe	Ser	Phe	Pro	Ile
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Ser	Leu	Ile	Met	Leu	Val	Val	Ser	Trp	Phe	Trp	Met	His	Trp	Leu	Phe
			325					330					335		
Leu	Gly	Cys	Asn	Phe	Lys	Glu	Thr	Cys	Ser	Leu	Ser	Lys	Lys	Lys	Lys
		340						345				350			
Thr	Lys	Arg	Glu	Gln	Leu	Ser	Glu	Lys	Arg	Ile	Gln	Glu	Glu	Tyr	Glu
		355				360					365				
Lys	Leu	Gly	Asp	Ile	Ser	Tyr	Pro	Glu	Met	Val	Thr	Gly	Phe	Phe	Phe
		370				375					380				
Ile	Leu	Met	Thr	Val	Leu	Trp	Phe	Thr	Arg	Glu	Pro	Gly	Phe	Val	Pro
385					390					395					400
Gly	Trp	Asp	Ser	Phe	Phe	Glu	Lys	Lys	Gly	Tyr	Arg	Thr	Asp	Ala	Thr
			405					410					415		
Val	Ser	Val	Phe	Leu	Gly	Phe	Leu	Leu	Phe	Leu	Ile	Pro	Ala	Lys	Lys
		420						425				430			
Pro	Cys	Phe	Gly	Lys	Lys	Asn	Asp	Gly	Glu	Asn	Gln	Glu	His	Ser	Leu
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Trp Glu Ile Val Ile Leu Val Gly Gly Gly Tyr Ala Leu Ala Ser Gly				
465		470		475
Ser Lys Ser Ser Gly Leu Ser Thr Trp Ile Gly Asn Gln Met Leu Ser				480
	485		490	495
Leu Ser Ser Leu Pro Pro Trp Ala Val Thr Leu Leu Ala Cys Ile Leu				
	500		505	510
Val Ser Ile Val Thr Glu Phe Val Ser Asn Pro Ala Thr Ile Thr Ile				
	515		520	525
Phe Leu Pro Ile Leu Cys Ser Leu Ser Glu Thr Met His Ile Asn Pro				
	530		535	540
Leu Tyr Thr Leu Ile Pro Val Thr Met Cys Ile Ser Phe Ala Val Met				
545		550		555
Leu Pro Val Gly Asn Pro Pro Asn Ala Ile Val Phe Ser Tyr Gly His				560
	565		570	575
Cys Gln Ile Lys Asp Met Val Lys Ala Gly Leu Gly Val Asn Val Ile				
	580		585	590
Gly Leu Val Ile Val Met Val Ala Ile Asn Thr Trp Gly Val Ser Leu				
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<210> 3955
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 <212> DNA
 <213> Homo sapiens

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<210> 3956
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 3956

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 20 25 30
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 35 40 45
 Lys Glu Val Ser Ser Ser Glu Asn Pro Ser Ser His Ser Lys Val Arg
 50 55 60
 Ser Val Ile Met Val Val Phe Ala Glu Asp Lys Ser Arg Glu Asp Gln
 65 70 75 80
 Leu Arg His Trp Lys Tyr Trp His Ser Arg Gln His Thr Ala Lys Gln
 85 90 95
 Arg Cys Ile Asp Ile Ala Asp Tyr Lys Glu Ser Phe Asn Thr Ile Ser
 100 105 110
 Asn Ile Glu Glu Ile Ala Tyr Asn Ala Ile Ser Phe Thr Trp Asp Ile
 115 120 125
 Asn Asp Glu Ala Lys Val Phe Ile Ser Val Asn Cys Leu Ser Thr Asp
 130 135 140
 Phe Ser Ser Gln Lys Gly Val Lys Gly Leu Pro Leu Asn Ile Gln Val
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<210> 3957

<211> 3891

<212> DNA

<213> Homo sapiens

<400> 3957

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<210> 3958

<211> 440

<212> PRT

<213> Homo sapiens

<400> 3958

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Thr Glu Pro Ala Gln Ala Gln Lys Cys Tyr Arg Asp Leu Ala Leu Val
           35           40           45
Ser Arg Asp Gly Met Asn Ile Val Leu Asn Lys Ile Asn Gln Ile Leu
           50           55           60
Met Glu Lys Tyr Leu Lys Leu Gln Asp Thr Cys Arg Thr Gln Leu Val
           65           70           75           80
Trp Leu Val Arg Glu Leu Val Lys Ser Gly Val Leu Gly Ala Asp Gly
           85           90           95
Val Cys Met Thr Phe Met Lys Gln Ile Ala Gly Gly Asp Val Thr Ala
           100          105          110
Lys Asn Ile Trp Leu Ala Glu Ser Val Leu Asp Ile Leu Thr Glu Gln
           115          120          125
Arg Glu Trp Val Leu Lys Ser Ser Ile Leu Ile Ala Met Ala Val Tyr
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Thr Tyr Leu Arg Leu Ile Val Asp His His Gly Thr Ala Gln Leu Gln
           145          150          155          160
Ala Leu Arg Gln Lys Glu Val Asp Phe Cys Ile Ser Leu Leu Arg Glu
           165          170          175
Arg Phe Met Glu Cys Leu Met Ile Gly Arg Asp Leu Val Arg Leu Leu
           180          185          190
Gln Asn Val Ala Arg Ile Pro Glu Phe Glu Leu Leu Trp Lys Asp Ile
           195          200          205
Ile His Asn Pro Gln Ala Leu Ser Pro Gln Phe Thr Gly Ile Leu Gln
           210          215          220
Leu Leu Gln Ser Arg Thr Ser Arg Lys Phe Leu Ala Cys Arg Leu Thr
           225          230          235          240
Pro Asp Met Glu Thr Lys Leu Leu Phe Met Thr Ser Arg Val Arg Phe
           245          250          255
Gly Gln Gln Lys Arg Tyr Gln Asp Trp Phe Gln Arg Gln Tyr Leu Ser
           260          265          270
Thr Pro Asp Ser Gln Ser Leu Arg Cys Asp Leu Ile Arg Tyr Ile Cys
           275          280          285
Gly Val Val His Pro Ser Asn Glu Val Leu Ser Ser Asp Ile Leu Pro
           290          295          300
Arg Trp Ala Ile Ile Gly Trp Leu Leu Thr Thr Cys Thr Ser Asn Val
           305          310          315          320
Ala Ala Ser Asn Ala Lys Leu Ala Leu Phe Tyr Asp Trp Leu Phe Phe
           325          330          335
Ser Pro Asp Lys Asp Ser Ile Met Asn Ile Glu Pro Ala Ile Leu Val
           340          345          350
Met His His Ser Met Lys Pro His Pro Ala Ile Thr Ala Thr Leu Leu
           355          360          365
Asp Phe Met Cys Arg Ile Ile Pro Asn Phe Tyr Pro Pro Leu Glu Gly
           370          375          380
His Val Arg Gln Gly Val Phe Ser Ser Leu Asn His Ile Val Glu Lys

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385          390          395          400
Arg Val Leu Ala Cys Lys Lys Tyr Trp Leu Tyr Leu Arg Leu Leu Gly
          405          410          415
Ile Cys Leu Leu Xaa Leu Leu Glu Glu Phe Leu Ser Cys His Arg Ile
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Thr Lys Thr Pro Ser Ser Pro Val
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<210> 3959
 <211> 752
 <212> DNA
 <213> Homo sapiens

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600
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<210> 3960
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 3960
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Gly Pro Asn Ser Pro Leu Asp Phe Leu Phe Ser Phe Gln Asn Ala Val
20     25     30
Ser Lys Tyr Gly Ser Gln Phe Gln Gly Asn Ser Gln His Asp Ala Leu
35     40     45
Glu Phe Leu Leu Trp Leu Leu Asp Arg Val His Glu Asp Leu Glu Gly

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50		55		60	
Ser Ser Arg Trp Ala Arg Cys Arg Arg Ser Phe Arg Leu Lys Pro Leu					
65		70		75	80
Lys Pro Leu Arg Thr Ala Cys His His Gln Leu Ser Phe Leu					
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<210> 3961
 <211> 2505
 <212> DNA
 <213> Homo sapiens

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<210> 3962

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3962

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			20				25				30				
Thr	Val	Met	Tyr	Ile	Cys	His	Pro	Glu	Ser	Lys	His	Glu	Ile	Leu	Ser

35 40 45
 Val Ala Glu Val Thr Thr Cys Glu Tyr Glu Val Val Ile Leu Thr Pro
 50 55 60
 Leu Leu Cys Ser His Pro Lys Tyr Arg Phe Arg Ala Ser Pro Val Asn
 65 70 75 80
 Asp Ile Phe Cys Gln Ser Leu Pro Gly Ser Pro Phe Lys Pro Leu Thr
 85 90 95
 Leu Arg Gln Leu Glu Gln Gln Glu Glu Ile Leu Arg Val Pro Phe Arg
 100 105 110
 Arg Asn Lys Glu Glu Asp Leu Gln Ser Thr Lys Glu Glu Arg Phe Pro
 115 120 125
 Ala Ile His Lys Ser Ile Ala Ile Gly Ser Gln Pro Val Leu Thr Val
 130 135 140
 Gly Thr Thr His Ile Ser Lys Leu Thr Asp Asp Gln Leu Ile Lys Glu
 145 150 155 160
 Phe Leu Ser Gly Ser Tyr Cys Phe Arg Gly Gly Val Gly Trp Trp Lys
 165 170 175
 Tyr Glu Phe Cys Tyr Gly Lys His Val His Gln Tyr His Glu Asp Lys
 180 185 190
 Asp Ser Gly Lys Thr Ser Val Val Val Gly Thr Trp Asn Gln Glu Glu
 195 200 205
 His Ile Glu Trp Ala Lys Lys Asn Thr Ala Arg Ala Tyr His Leu Gln
 210 215 220
 Asp Asp Gly Thr Gln Thr Val Arg Met Val Ser His Phe Tyr Gly Asn
 225 230 235 240
 Gly Asp Ile Cys Asp Ile Thr Asp Lys Pro Arg Gln Val Thr Val Lys
 245 250 255
 Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala Val Thr Val Tyr Met
 260 265 270
 Leu Glu Pro His Ser Cys Gln Tyr Ile Leu Gly Val Glu Ser Pro Val
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<210> 3963
 <211> 1513
 <212> DNA
 <213> Homo sapiens

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 360

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<210> 3964

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3964

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			20					25					30		
Gln	Phe	Ser	Asn	Ile	Ser	Phe	Ser	Arg	Asp	Ser	Pro	Glu	Glu	Asn	Val
		35					40					45			
Gln	Ser	Asn	Lys	Met	Asp	Leu	Ser	Gly	Gly	Met	Leu	Gln	Asp	Lys	Arg

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Val Gly Lys Gly Pro Gly Ser Arg Pro Gln Ile Ser Lys Glu Ser Ser
      85              90              95
Met Glu Arg Asn Pro Tyr Phe Asp Lys Asn Gly Asn Pro Ser Met Phe
      100              105              110
Gly Val Gly Asn Thr Ala Ala Gln Pro Arg Gly Met Gln Gln Pro Pro
      115              120              125
Ala Gln Pro Leu Ser Ser Ser Gln Pro Asn Leu Arg Ala Gln Val Pro
      130              135              140
Pro Pro Leu Leu Ser Pro Gln Val Pro Val Ser Leu Leu Lys Tyr Ala
145              150              155              160
Pro Asn Asn Gly Gly Leu Asn Pro Leu Phe Gly Pro Gln Gln Val Ala
      165              170              175
Met Leu Asn Gln Leu Ser Gln Leu Asn Gln Leu Ser Gln Ile Ser Gln
      180              185              190
Leu Gln Arg Leu Leu Ala Gln Gln Gln Arg Ala Gln Ser Gln Arg Ser
      195              200              205
Val Pro Ser Gly Asn Arg Pro Gln Gln Asp Gln Gln Gly Arg Pro Leu
      210              215              220
Ser Val Gln Gln Gln Met Met Gln Gln Ser Arg Gln Leu Asp Pro Asn
225              230              235              240
Leu Leu Val Lys Gln Gln Thr Pro Pro Ser Gln Gln Gln Pro Leu His
      245              250              255
Gln Pro Ala Met Lys Ser Phe Leu Asp Asn Val Met Pro His Thr Thr
      260              265              270
Pro Glu Leu Gln Lys Gly Pro Ser Pro Ile Asn Ala Phe Ser Asn Phe
      275              280              285
Pro Ile Gly Leu Asn Ser Asn Leu Asn Val Asn Met Asp Met Asn Ser
      290              295              300
Ile Lys Glu Pro Gln Ser Arg Leu Arg Lys Trp Thr Thr Val Asp Ser
305              310              315              320
Ile Ser Val Asn Thr Ser Leu Asp Gln Asn Ser Ser Lys His Gly Ala
      325              330              335
Ile Ser Ser Gly Phe Arg Leu Glu Glu Ser Pro Phe Val Pro Tyr Asp
      340              345              350
Phe Met Asn Ser Ser Thr Ser Pro Ala Ser Pro Pro Gly Ser Ile Gly
      355              360              365
Asp Gly Trp Pro Arg Ala Lys Ser Pro Asn Gly Ser Ser Ser Val Asn
      370              375              380
Trp Pro Pro Glu Phe Arg Pro Gly Glu Pro Trp Lys Gly Tyr Pro Asn
385              390              395              400
Ile Asp Pro Glu Thr Asp Pro Tyr Val Thr Pro Gly Ser Val Ile Asn
      405              410              415
Asn Leu Pro Ile Asn Thr Val Arg Glu Val Asp His Leu Arg Asp Arg
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Asn Ser Gly Thr
      435

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<210> 3965

<211> 2850

<212> DNA

<213> Homo sapiens

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<210> 3966

<211> 782

<212> PRT

<213> Homo sapiens

<400> 3966

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3128

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465		470		475
Asp Thr Pro Pro Pro Leu Glu Lys Ala Ala Glu Ala Ala Leu Phe				
	485		490	495
Lys Gly Lys Trp Asp Asp Glu Ala Arg Glu Met Ala Pro Pro Pro Ala				
	500		505	510
Pro Leu Leu Ala Pro Arg Pro Gly Glu Thr Arg Pro Gly Cys Arg Lys				
	515		520	525
Pro Gly Thr Val Ser Phe Ala Asp Val Ala Val Tyr Phe Ser Pro Glu				
	530		535	540
Glu Trp Gly Cys Leu Arg Pro Ala Gln Arg Ala Leu Tyr Arg Asp Val				
545		550		555
Met Gln Glu Thr Tyr Gly His Leu Gly Ala Leu Gly Phe Pro Gly Pro				
	565		570	575
Lys Pro Ala Leu Ile Ser Trp Met Glu Gln Glu Ser Glu Ala Trp Ser				
	580		585	590
Pro Ala Ala Gln Asp Pro Glu Lys Gly Glu Arg Leu Gly Gly Ala Arg				
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Arg Gly Asp Val Pro Asn Arg Lys Glu Glu Glu Pro Glu Glu Val Pro				
	610		615	620
Arg Ala Lys Gly Pro Arg Lys Ala Pro Val Lys Glu Ser Pro Glu Val				
625		630		635
Leu Val Glu Arg Asn Pro Asp Pro Ala Ile Ser Val Ala Pro Ala Arg				
	645		650	655
Ala Gln Pro Pro Lys Asn Ala Ala Trp Asp Pro Thr Thr Gly Ala Gln				
	660		665	670
Pro Pro Ala Pro Ile Pro Ser Met Asp Ala Gln Ala Gly Gln Arg Arg				
	675		680	685
His Val Cys Thr Asp Cys Gly Arg Arg Phe Thr Tyr Pro Ser Leu Leu				
	690		695	700
Val Ser His Arg Arg Met His Ser Gly Glu Arg Pro Phe Pro Cys Pro				
705		710		715
Glu Cys Gly Met Arg Phe Lys Arg Lys Phe Ala Val Glu Ala His Gln				
	725		730	735
Trp Ile His Arg Ser Cys Ser Gly Gly Arg Arg Gly Arg Arg Pro Gly				
	740		745	750
Ile Arg Ala Val Pro Arg Ala Pro Val Arg Gly Asp Arg Asp Pro Pro				
	755		760	765
Val Leu Phe Arg His Tyr Pro Asp Ile Phe Glu Glu Cys Gly				
	770		775	780

<210> 3967

<211> 892

<212> DNA

<213> Homo sapiens

<400> 3967

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120

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180

gccctggagg tggagtggca cctgctggcc caccacagca tcacagatgt ggctgtgatt
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 300
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 892

<210> 3968
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 3968
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 Val Ala Arg Gln Ile Leu Pro Arg Gly Arg Gly Arg Leu Val Gly Asp
 20 25 30
 Thr Val Val Phe Lys Asp Gly Gln Tyr Trp Ile Arg Gly Arg Thr Ser
 35 40 45
 Val Asp Ile Ile Lys Thr Gly Gly Tyr Lys Val Ser Ala Leu Glu Val
 50 55 60
 Glu Trp His Leu Leu Ala His Pro Ser Ile Thr Asp Val Ala Val Ile
 65 70 75 80
 Gly Val Pro Asp Met Thr Trp Gly Gln Arg Val Thr Ala Val Val Thr
 85 90 95
 Leu Arg Glu Gly His Ser Leu Ser His Arg Glu Leu Lys Glu Trp Ala
 100 105 110
 Arg Asn Val Leu Ala Pro Tyr Ala Val Pro Ser Glu Leu Val Leu Val
 115 120 125
 Glu Glu Ile Pro Arg Asn Gln Met Gly Lys Ile Asp Lys Lys Ala Leu
 130 135 140
 Ile Arg His Phe His Pro Ser
 145 150

<210> 3969
 <211> 915

<212> DNA

<213> Homo sapiens

<400> 3969

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120
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240
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720
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780
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915

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<210> 3970

<211> 89

<212> PRT

<213> Homo sapiens

<400> 3970

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Gly Gly Ala Pro Pro Ile Phe Leu Pro Ser Asp Gly Gln Ala Leu Val
20      25      30
Leu Gly Arg Gly Pro Leu Thr Gln Val Thr Asp Arg Lys Cys Ser Arg
35      40      45
Thr Gln Val Glu Leu Val Ala Asp Pro Glu Thr Arg Thr Val Ala Val
50      55      60
Lys Gln Val Ser Val Pro Leu Gln Gly Pro Ala Arg Pro Gly Asp Gly
65      70      75      80
Ile Trp Gly Gly Ile Ala Ser Arg Gln

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85

<210> 3971

<211> 433

<212> DNA

<213> Homo sapiens

<400> 3971

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ctgggggaacg ggtaatcaga gaaaccctca ctcataagggt ggtgcccttt atgcagagac
180
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300
gttgtaagca atgagcttag acaggaaaatg gggctctggtt cacatgggaa atggtaggac
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<210> 3972

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3972

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Ser	Leu	Leu	Thr	Thr	Leu	Ser	Pro	Ser	Leu	Thr	Leu	Phe	Gln	Pro	His
			20					25					30		
Trp	Pro	Cys	Ser	Ser	Ser	Thr	Gln	Ala	His	Pro	Gly	Pro	Leu	His	Leu
		35				40					45				
Pro	Phe	Ser	Leu	Ser	Gly	Asp	Leu	Pro	Pro	Ser	Phe	Lys	Ser	Leu	His
	50				55					60					
Lys	Gly	His	His	Pro	Met	Ser	Glu	Gly	Phe	Ser	Asp	Tyr	Pro	Phe	Pro
65				70				75					80		
Ser	Arg	Ala	Leu	Pro	Ser	Met	Leu	His	Phe	Pro	Arg	Ala	Leu	Asn	
			85					90					95		
Thr	Thr	Tyr	Leu	Ser	Phe	Ile	Phe	Ser	Leu	Ser	Phe	Phe	Cys	Leu	Leu
		100					105						110		
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	115					120									

<210> 3973

<211> 984

<212> DNA

<213> Homo sapiens

<400> 3973

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 120
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 180
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<210> 3974

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3974

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Asp	Pro	Ser	Arg	Gln	Pro	Tyr	Arg	Val	Lys	Val	Ile	Asp	Phe	Gly	Ser
			20					25					30		
Ala	Ser	His	Val	Ser	Lys	Ala	Val	Cys	Ser	Thr	Tyr	Leu	Gln	Ser	Arg
			35				40						45		
Tyr	Tyr	Arg	Ala	Pro	Glu	Ile	Ile	Leu	Gly	Leu	Pro	Phe	Cys	Glu	Ala
			50			55					60				
Ile	Asp	Met	Trp	Ser	Leu	Gly	Cys	Val	Ile	Ala	Glu	Leu	Phe	Leu	Gly
65					70					75				80	
Trp	Pro	Leu	Tyr	Pro	Gly	Ala	Ser	Glu	Tyr	Asp	Gln	Ile	Arg	Tyr	Ile
				85					90					95	
Ser	Gln	Thr	Gln	Gly	Leu	Pro	Ala	Glu	Tyr	Leu	Leu	Ser	Ala	Gly	Thr

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<400> 3975
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480
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540

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593

<210> 3976

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3976

Met	Gly	Phe	Ser	Leu	Leu	Glu	Gly	Pro	Ala	Ser	Leu	Gln	Pro	Pro	His
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Arg	Glu	Ser	Leu	Pro	Leu	His	Ser	Leu	Pro	Arg	Asp	Gly	Ser	Trp	Gly
			20					25					30		
Leu	Lys	Gly	Ala	Trp	Ala	Ser	Ala	Ser	Leu	Gln	Ala	Ala	Ser	Asn	Ser
		35				40					45				
Gln	Ser	Gly	Phe	Gly	Cys	Pro	Gln	Cys	Ser	Pro	Glu	Ala	Ala	Ala	Pro
	50					55				60					
His	Pro	Thr	Ile	Leu	Leu	Arg	Arg	Leu	Gly	Ile	Ile	Gly	Leu	Pro	
65				70					75					80	
Trp	Lys	Gly	Ser	Ser	Arg	Arg	Gly	Leu	Arg	Glu	Pro	His	Arg	Cys	Pro
				85				90						95	
Leu	Ala	Cys	Gln	Thr											
				100											

<210> 3977

<211> 2668

<212> DNA

<213> Homo sapiens

<400> 3977

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120
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2340

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 2668

<210> 3978

<211> 667

<212> PRT

<213> Homo sapiens

<400> 3978

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<210> 3979

<211> 2746

<212> DNA

<213> Homo sapiens

<400> 3979

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<210> 3980

<211> 478

<212> PRT

<213> Homo sapiens

<400> 3980

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Arg Lys Arg Tyr Leu Thr Ile Gly Leu Ser Ser Val Lys Arg Lys Lys		95
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Gly Asn Tyr Leu Leu Glu Thr Ile Lys Ser Ile Phe Glu Gln Ser Ser		110
	115	120
Tyr Glu Glu Leu Lys Glu Ile Ser Val Val Val His Leu Ala Asp Phe		125
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Asn Ser Ser Trp Arg Asp Ala Met Val Gln Asp Ile Thr Gln Lys Phe		140
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Ala His His Ile Ile Ala Gly Arg Leu Met Val Ile His Ala Pro Glu		160
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Glu Tyr Tyr Pro Ile Leu Asp Gly Leu Lys Arg Asn Tyr Asn Asp Pro		175
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Glu Asp Arg Val Lys Phe Arg Ser Lys Gln Asn Val Asp Tyr Ala Phe		190
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Leu Leu Asn Phe Cys Ala Asn Thr Ser Asp Tyr Tyr Val Met Leu Glu		205
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Asp Asp Val Arg Cys Ser Lys Asn Phe Leu Thr Ala Ile Lys Lys Val		220
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Ile Ala Ser Leu Glu Gly Thr Tyr Trp Val Thr Leu Glu Phe Ser Lys		240
	245	250
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Ala His Phe Leu Leu Met Phe Tyr Gln Glu Met Pro Cys Asp Trp Leu		270
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Trp Gly Lys Pro Pro Ser Thr Gly Asp Val Phe Val Ile Val Phe Glu		365
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Val Met Pro Ser Lys Gln Arg Arg Gln Cys Ser Ser Tyr Leu Arg Leu		415
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Ile Pro Phe Asp Ile His Cys Met Arg Ile Tyr Val Thr Lys Thr Gln		445
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 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3982

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      35           40           45
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      50           55           60
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      65           70           75           80
Lys Gln Ile Gly Tyr Leu Phe Ile Ser Val Leu Val Asn Ser Asn Ser
      85           90           95
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      130          135          140
Leu Val Ala Gly Asp Thr Met Asp Ser Val Lys Gln Ser Ala Ala Leu
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Val Val Thr Ala Ala Thr Ser Leu Ile Thr Thr Leu Ala Gln Lys Asn
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Leu Ile Ile His His Asp Ser Glu Pro Asn Leu Leu Val Arg Ala Cys
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Leu Ala Leu Glu Ser Met Cys Thr Leu Ala Ser Ser Glu Phe Ser His
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Glu Ala Val Lys Thr His Ile Asp Thr Val Ile Asn Ala Leu Lys Thr
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Glu Arg Asp Val Ser Val Arg Gln Arg Ala Ala Asp Leu Leu Tyr Ala
      370          375          380
Met Cys Asp Arg Ser Asn Ala Lys Gln Ile Val Ser Glu Met Leu Ser
      385          390          395          400
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Val Ala Ile Leu Ala Glu Lys Tyr Ala Val Asp Tyr Thr Trp Tyr Val

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3146

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<212> PRT

<213> Homo sapiens

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3149

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Phe Thr Phe Glu

470

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Cys Cys Trp Met Arg Leu Arg Ser Glu Arg Leu Ser Ser Ala Leu Ala
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		Asp	Asp	Gln	His
			Lys	Ile	Pro
				Cys	His
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<211> 955

<212> PRT

<213> Homo sapiens

<400> 3990

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Arg	Ser	Arg	Ser	Leu	Ser	Arg	Ser	Arg	Lys	Arg	Arg	Leu	Ser	Ser	Arg
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Ser	Arg	Ser	Arg	Ser	Tyr	Ser	Pro	Ala	His	Asn	Arg	Glu	Arg	Asn	His
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Pro	Arg	Val	Tyr	Gln	Asn	Arg	Asp	Phe	Arg	Gly	His	Asn	Arg	Gly	Tyr
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Arg	Arg	Pro	Tyr	Tyr	Phe	Arg	Gly	Arg	Asn	Arg	Gly	Phe	Tyr	Pro	Trp
				85					90					95	
Gly	Gln	Tyr	Asn	Arg	Gly	Gly	Tyr	Gly	Asn	Tyr	Arg	Ser	Asn	Trp	Gln
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Asn	Tyr	Arg	Gln	Ala	Tyr	Ser	Pro	Arg	Arg	Gly	Arg	Ser	Arg	Ser	Arg
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Ser	Pro	Lys	Arg	Arg	Ser	Pro	Ser	Pro	Arg	Ser	Arg	Ser	His	Ser	Arg
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Asn	Ser	Asp	Lys	Ser	Ser	Ser	Asp	Arg	Ser	Arg	Arg	Ser	Ser	Ser	Ser
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Arg	Ser	Ser	Ser	Asn	His	Ser	Arg	Val	Glu	Ser	Ser	Lys	Arg	Lys	Ser
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Ala	Lys	Glu	Lys	Lys	Ser	Ser	Ser	Lys	Asp	Ser	Arg	Pro	Ser	Gln	Ala
			180					185					190		
Ala	Gly	Asp	Asn	Gln	Gly	Asp	Glu	Val	Lys	Glu	Gln	Thr	Phe	Ser	Gly
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Gly	Thr	Ser	Gln	Asp	Thr	Lys	Ala	Ser	Glu	Ser	Ser	Lys	Pro	Trp	Pro
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Pro	Ser	Pro	Pro	Leu	Ser	Ser	Thr	Ser	Gln	Met	Gly	Ser	Thr	Leu	Pro
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Pro	Pro	Ser	Thr	Gly	Ser	Thr	Tyr	Gly	Ser	Ser	Gln	Lys	Glu	Glu	Ser
			325					330					335		
Ala	Ala	Ser	Gly	Gly	Ala	Ala	Tyr	Thr	Lys	Arg	Tyr	Leu	Glu	Glu	Gln
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Lys	Thr	Glu	Asn	Gly	Lys	Asp	Lys	Glu	Gln	Lys	Gln	Thr	Asn	Thr	Asp

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 385 390 395 400
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 405 410 415
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 Glu Pro Lys Phe Met Ser Lys Val Ile Gly Ala Asn Lys Asn Gln Glu
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 675 680 685
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 740 745 750
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 Gln Ser Ser His Ser Tyr Lys Ala Glu Glu Tyr Thr Glu Glu Thr Glu

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Thr Phe Gln Phe Arg Ala Arg Gly Arg Gly Trp Gly Arg Gly Asn Tyr
          835          840          845
Ser Gly Asn Asn Asn Asn Asn Ser Asn Asn Asp Phe Gln Lys Arg Asn
          850          855          860
Arg Glu Glu Glu Trp Asp Pro Glu Tyr Thr Pro Lys Ser Lys Lys Tyr
865          870          875          880
Tyr Leu His Asp Asp Arg Glu Gly Glu Gly Ser Asp Lys Trp Val Ser
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Arg Gly Arg Gly Arg Gly Ala Phe Pro Arg Gly Arg Gly Arg Phe Met
          900          905          910
Phe Arg Lys Ser Ser Thr Ser Pro Lys Trp Ala His Asp Lys Phe Ser
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<210> 3992
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Pro Phe Glu Pro Ala Pro Tyr Gln Gln Gly Met Tyr Tyr Thr Pro Pro

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65      70      75      80
Val  Val  Asn  Ser  Gln  Tyr  Gly  Thr  Gln  Pro  Gln  Gln  Tyr  Pro  Pro  Ile
      85      90      95
Tyr  Pro  Ser  His  Tyr  Asp  Gly  Arg  Arg  Val  Tyr  Pro  Ala  Pro  Ser  Tyr
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Gly Glu Arg Lys Asp Lys Glu Ser Pro Arg Ala Gly Pro Thr Glu Pro		
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Met Asp Thr Ser Glu Ala Thr Val Cys His Ser Asp Leu Glu Arg Thr		
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Pro Pro Leu Leu Pro Gly Arg Pro Ala Arg Asp Arg Gly Pro Glu Ser		
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Arg Pro Thr Glu Leu Ser Leu Glu Glu Leu Ser Ile Ser Ala Arg Gln		
1795	1800	1805
Gln Pro Thr Pro Leu Thr Pro Ala Gln Pro Ala Pro Ala Pro Ala Pro		
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Ala Thr Thr Thr Gly Thr Arg Ala Gly Gly His Pro Glu Glu Pro Leu		
1825	1830	1835
Ser Arg Leu Ser Arg Lys Arg Lys Leu Leu Glu Asp Thr Glu Ser Gly		
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Lys Thr Leu Leu Asp Ala Tyr Arg Val Trp Gln Gln Gly Gln Lys		
1860	1865	1870
Gly Val Ala Tyr Asp Leu Gly Arg Val Glu Arg Ile Met Ser Glu Thr		
1875	1880	1885
Tyr Met Leu Ile Lys Gln Val Asp Glu Glu Ala Ala Leu Glu Gln Ala		
1890	1895	1900
Val Lys Phe Cys Gln Val His Leu Gly Ala Ala Ala Gln Arg Gln Ala		
1905	1910	1915
Ser Gly Asp Thr Pro Thr Thr Pro Lys His Pro Lys Asp Ser Arg Glu		
1925	1930	1935
Asn Phe Phe Pro Val Thr Val Val Pro Thr Ala Pro Asp Pro Val Pro		
1940	1945	1950
Ala Asp Ser Val Gln Arg Pro Ser Asp Ala His Thr Lys Pro Arg Pro		
1955	1960	1965
Ala Leu Ala Ala Ala Thr Thr Ile Ile Thr Cys Pro Pro Ser Ala Ser		
1970	1975	1980
Ala Ser Thr Leu Asp Gln Ser Lys Asp Pro Gly Pro Pro Arg Pro His		
1985	1990	1995
Arg Pro Glu Ala Thr Pro Ser Met Ala Ser Leu Gly Pro Glu Gly Glu		
2005	2010	2015
Glu Leu Ala Arg Val Ala Glu Gly Thr Ser Phe Pro Pro Gln Glu Pro		
2020	2025	2030
Arg His Ser Pro Gln Val Lys Met Ala Pro Thr Ser Ser Pro Ala Glu		
2035	2040	2045
Pro His Cys Trp Pro Ala Glu Ala Ala Leu Gly Thr Gly Ala Glu Pro		
2050	2055	2060
Thr Cys Ser Gln Glu Gly Lys Leu Arg Pro Glu Pro Arg Arg Asp Gly		
2065	2070	2075
Glu Ala Gln Glu Ala Ala Ser Glu Thr Gln Pro Leu Ser Ser Pro Pro		
2085	2090	2095
Thr Ala Ala Ser Ser Lys Ala Pro Ser Ser Gly Ser Ala Gln Pro Pro		
2100	2105	2110
Glu Gly His Pro Gly Lys Pro Glu Pro Ser Arg Ala Lys Ser Arg Pro		
2115	2120	2125
Leu Pro Asn Met Pro Lys Leu Val Ile Pro Ser Ala Ala Thr Lys Phe		
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Pro Pro Glu Ile Thr Val Thr Pro Pro Thr Pro Thr Leu Leu Ser Pro		

2145		2150		2155		2160
Lys Gly Ser Ile Ser Glu Glu Thr Lys Gln Lys Leu Lys Ser Ala Ile						
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	2180		2185		2190	
Pro Ala Leu Glu Val Leu Glu Thr Ser Ser Gln Glu Ser Ser Leu Glu						
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<210> 3999

<211> 2546

<212> DNA

<213> Homo sapiens

<400> 3999

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<210> 4000

<211> 606

<212> PRT

<213> Homo sapiens

<400> 4000

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Glu Glu Leu Cys Thr Pro Pro Asp Pro Gly Ala Ala Phe Val Val Val
          35           40           45
Glu Cys Pro Asp Glu Ser Phe Ile Gln Pro Ile Cys Glu Asn Ala Thr
          50           55           60
Phe Gln Arg Tyr Gln Gly Lys Ala Asp Ala Pro Val Ala Leu Val Val
65           70           75           80
His Met Ala Pro Ala Ser Val Leu Val Asp Ser Arg Tyr Gln Gln Trp
          85           90           95
Met Glu Arg Phe Gly Pro Asp Thr Gln His Leu Val Leu Asn Glu Asn
          100          105          110
Cys Ala Ser Val His Asn Leu Arg Ser His Lys Ile Gln Thr Gln Leu
          115          120          125
Asn Leu Ile His Pro Asp Ile Phe Pro Leu Leu Thr Ser Phe Arg Cys
          130          135          140
Lys Lys Glu Gly Pro Thr Leu Ser Val Pro Met Val Gln Gly Glu Cys
145          150          155          160
Leu Leu Lys Tyr Gln Leu Arg Pro Arg Arg Glu Trp Gln Arg Asp Ala
          165          170          175
Ile Ile Thr Cys Asn Pro Glu Glu Phe Ile Val Glu Ala Leu Gln Leu
          180          185          190
Pro Asn Phe Gln Gln Ser Val Gln Glu Tyr Arg Arg Ser Ala Gln Asp
          195          200          205
Gly Pro Ala Pro Ala Glu Lys Arg Ser Gln Tyr Pro Glu Ile Ile Phe
210          215          220
Leu Gly Thr Gly Ser Ala Ile Pro Met Lys Ile Arg Asn Val Ser Ala
225          230          235          240
Thr Leu Val Asn Ile Ser Pro Asp Thr Ser Leu Leu Leu Asp Cys Gly
          245          250          255
Glu Gly Thr Phe Gly Gln Leu Cys Arg His Tyr Gly Asp Gln Val Asp
          260          265          270
Arg Val Leu Gly Thr Leu Ala Ala Val Phe Val Ser His Leu His Ala
          275          280          285
Asp His His Thr Gly Leu Pro Ser Ile Leu Leu Gln Arg Glu Arg Ala
290          295          300
Leu Ala Ser Leu Gly Lys Pro Leu His Pro Leu Leu Val Val Ala Pro
305          310          315          320
Asn Gln Leu Lys Ala Trp Leu Gln Gln Tyr His Asn Gln Cys Gln Glu
          325          330          335
Val Leu His His Ile Ser Met Ile Pro Ala Lys Cys Leu Gln Glu Gly
          340          345          350
Ala Glu Ile Ser Ser Pro Ala Val Glu Arg Leu Ile Ser Ser Leu Leu
          355          360          365
Arg Thr Cys Asp Leu Glu Glu Phe Gln Thr Cys Leu Val Arg His Cys
370          375          380
Lys His Ala Phe Gly Cys Ala Leu Val His Thr Ser Gly Trp Lys Val
385          390          395          400
Val Tyr Ser Gly Asp Thr Met Pro Cys Glu Ala Leu Val Arg Met Gly
          405          410          415
Lys Asp Ala Thr Leu Leu Ile His Glu Ala Thr Leu Glu Asp Gly Leu

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				420					425					430		
Glu	Glu	Glu	Ala	Val	Glu	Lys	Thr	His	Ser	Thr	Thr	Ser	Gln	Ala	Ile	
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Ser	Val	Gly	Met	Arg	Met	Asn	Ala	Glu	Phe	Ile	Met	Leu	Asn	His	Phe	
			450			455					460					
Ser	Gln	Arg	Tyr	Ala	Lys	Val	Pro	Leu	Phe	Ser	Pro	Asn	Phe	Ser	Glu	
465					470					475					480	
Lys	Val	Gly	Val	Ala	Phe	Asp	His	Met	Lys	Val	Cys	Phe	Gly	Asp	Phe	
				485					490					495		
Pro	Thr	Met	Pro	Lys	Leu	Ile	Pro	Pro	Thr	Glu	Ser	Pro	Val	Cys	Trp	
			500					505					510			
Arg	His	Arg	Gly	Asp	Gly	Gly	Ala	Gln	Gly	Glu	Ala	Gly	Ala	Ala	Ala	
			515				520					525				
Gly	Ala	Gly	Gly	Pro	Pro	Val	Gln	Gly	Ala	Gly	Arg	Arg	Pro	Gly	Gly	
			530			535					540					
Trp	Gly	Ala	Ser	Ala	Glu	Ala	Gly	Pro	His	Arg	Gly	Ala	Thr	Gly	Gln	
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Glu	Gly	Gln	Ser	Pro	Val	Lys	Ile	Trp	Glu	Thr	Leu	Asn	Ser	Glu	Gly	
				565					570					575		
Cys	Val	Ser	Ser	Ala	Pro	Arg	Thr	His	Pro	Tyr	Leu	Pro	Ser	Leu	Leu	
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<210> 4001
<211> 1251
<212> DNA
<213> Homo sapiens
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<210> 4002

<211> 417

<212> PRT

<213> Homo sapiens

<400> 4002

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Leu	Ser	Asp	Ser	Leu	Gly	Val	Ser	Val	Met	Ala	Thr	Asp	Gln	Asp	Ser
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Tyr	Ser	Thr	Ser	Ser	Thr	Glu	Glu	Leu	Glu	Gln	Phe	Ser	Ser	Pro	
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Ser	Val	Lys	Lys	Lys	Pro	Ser	Met	Ile	Leu	Gly	Lys	Ala	Arg	His	Arg
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Leu	Ser	Phe	Ala	Ser	Phe	Ser	Ser	Met	Phe	His	Ala	Phe	Leu	Ser	Asn
				85					90					95	
Asn	Arg	Lys	Leu	Tyr	Lys	Lys	Val	Val	Glu	Leu	Ala	Gln	Asp	Lys	Gly
			100					105					110		
Ser	Tyr	Phe	Gly	Ser	Leu	Val	Gln	Asp	Tyr	Lys	Val	Tyr	Ser	Leu	Glu
		115					120					125			
Met	Met	Ala	Arg	Gln	Thr	Ser	Ser	Thr	Glu	Met	Leu	Gln	Glu	Ile	Arg
	130					135					140				
Thr	Met	Met	Thr	Gln	Leu	Lys	Ser	Tyr	Leu	Leu	Gln	Ser	Thr	Glu	Leu
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Lys	Ala	Leu	Val	Asp	Pro	Ala	Leu	His	Ser	Glu	Glu	Glu	Leu	Glu	Ala
			165					170						175	
Ile	Val	Glu	Ser	Ala	Leu	Tyr	Lys	Cys	Val	Leu	Lys	Pro	Leu	Lys	Glu
		180					185					190			
Ala	Ile	Asn	Ser	Cys	Leu	His	Gln	Ile	His	Ser	Lys	Asp	Gly	Ser	Leu
	195						200					205			
Gln	Gln	Leu	Lys	Glu	Asn	Gln	Leu	Val	Ile	Leu	Ala	Thr	Thr	Thr	Thr
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Asp	Leu	Gly	Val	Thr	Thr	Ser	Val	Pro	Glu	Val	Pro	Met	Met	Glu	Lys

225		230		235		240									
Ile	Leu	Gln	Lys	Phe	Thr	Ser	Met	His	Lys	Ala	Tyr	Ser	Pro	Glu	Lys
				245					250					255	
Lys	Ile	Ser	Ile	Leu	Leu	Lys	Thr	Cys	Lys	Leu	Ile	Tyr	Asp	Ser	Met
			260					265					270		
Ala	Leu	Gly	Asn	Pro	Gly	Lys	Pro	Tyr	Gly	Ala	Asp	Asp	Phe	Leu	Pro
		275					280					285			
Val	Leu	Met	Tyr	Val	Leu	Ala	Arg	Ser	Asn	Leu	Thr	Glu	Met	Leu	Leu
	290						295				300				
Asn	Val	Glu	Tyr	Met	Met	Glu	Leu	Met	Asp	Pro	Ala	Leu	Gln	Leu	Gly
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Glu	Gly	Ser	Tyr	Tyr	Leu	Thr	Thr	Thr	Tyr	Gly	Ala	Leu	Glu	His	Ile
				325					330					335	
Lys	Ser	Tyr	Asp	Lys	Ile	Thr	Val	Thr	Arg	Gln	Leu	Ser	Val	Glu	Val
			340					345					350		
Gln	Asp	Ser	Ile	His	Arg	Trp	Glu	Arg	Arg	Arg	Thr	Leu	Asn	Lys	Ala
	355						360					365			
Arg	Ala	Ser	Arg	Ser	Ser	Val	Gln	Asp	Phe	Ile	Cys	Val	Ser	Tyr	Leu
	370					375					380				
Glu	Pro	Glu	Gln	Gln	Ala	Arg	Thr	Leu	Ala	Ser	Arg	Ala	Asp	Thr	Gln
385				390					395					400	
Ala	Gln	Ala	Leu	Cys	Ala	Gln	Cys	Ala	Glu	Lys	Phe	Ala	Val	Glu	Arg
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<210> 4003
 <211> 581
 <212> DNA
 <213> Homo sapiens

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<210> 4004

<211> 160
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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<210> 4005
 <211> 666
 <212> DNA
 <213> Homo sapiens

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acgcgt

666

<210> 4006

<211> 222

<212> PRT

<213> Homo sapiens

<400> 4006

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 35 40 45
 Pro Lys Met Thr Arg Ser Lys Leu Lys Glu Val Val Glu Lys Gly Met
 50 55 60
 Val Ile Pro Thr Trp Asn Ile Ser Pro Ile Lys Lys Ala Asn Glu Ile
 65 70 75 80
 Lys Pro Pro Gln Phe Val Asp Ile His Leu Glu Glu Asp Asp Ser Ser
 85 90 95
 Asp Glu Glu Tyr Gln Pro Asp Asp Glu Glu Glu Asp Glu Thr Ala Glu
 100 105 110
 Glu Ser Leu Leu Glu Ser Asp Val Glu Ser Thr Ala Ser Ser Pro Arg
 115 120 125
 Gly Ala Lys Lys Ser Arg Leu Arg Gln Ser Ser Glu Met Thr Glu Thr
 130 135 140
 Asp Glu Glu Ser Gly Ile Leu Ser Glu Ala Glu Lys Val Thr Thr Pro
 145 150 155 160
 Ala Ile Arg His Ile Ser Ala Glu Val Val Pro Met Gly Pro Pro Pro
 165 170 175
 Pro Pro Lys Pro Lys Gln Thr Arg Asp Ser Thr Phe Met Glu Lys Leu
 180 185 190
 His Ala Val Asp Glu Glu Leu Ala Ser Ser Pro Val Cys Met Asp Ser
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 Phe Gln Pro Met Asp Asp Ser Leu Ile Ala Phe Arg Thr Arg
 210 215 220

<210> 4007

<211> 2313

<212> DNA

<213> Homo sapiens

<400> 4007

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<210> 4008

<211> 290

<212> PRT

<213> Homo sapiens

<400> 4008

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Glu	Lys	Asp	Thr	Gly	Asp	Leu	Lys	Asp	Ser	Ser	Leu	Leu	Lys	Thr	Lys	50	55	60	
Arg	Lys	His	Lys	Lys	Lys	His	Lys	Glu	Arg	His	Lys	Met	Gly	Glu	Glu	65	70	75	80
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Lys	Glu	Tyr	Leu	Ala	Leu	Gln	Lys	Ala	Ser	Met	Ala	Ser	Leu	Lys	Lys	100	105	110	
Thr	Ile	Ser	Gln	Ile	Lys	Ser	Glu	Ser	Glu	Met	Glu	Thr	Asp	Ser	Gly	115	120	125	
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Asp	Leu	Leu	Glu	Gly	Asp	Thr	Glu	Cys	His	Ala	Arg	Phe	Lys	Thr	Pro	195	200	205	
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 <213> Homo sapiens

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<210> 4010
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<400> 4010
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 Met Gln Ala Ser Val Pro Gly Pro Ser Glu Glu Pro Val Val Tyr Asn
 35 40 45
 Pro Thr Thr Ala Ala Phe Ile Cys Asp Ser Leu Val Asn Glu Lys Thr
 50 55 60
 Ile Gly Ser Pro Pro Asn Glu Phe Tyr Cys Ser Glu Asn Thr Ser Val
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<210> 4011
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<212> DNA
<213> Homo sapiens
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<211> 419

<212> PRT

<213> Homo sapiens

<400> 4012

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Ser	Arg	Ser	Arg	Ala	Arg	Ala	Gly	Glu	Leu	Trp	Leu	Pro	His	Gly	Thr
	35						40					45			
Val	Ala	Thr	Pro	Val	Phe	Met	Pro	Val	Gly	Thr	Gln	Ala	Thr	Met	Lys
	50				55						60				
Gly	Ile	Thr	Thr	Glu	Gln	Leu	Asp	Ala	Leu	Gly	Cys	Arg	Ile	Cys	Leu
65				70					75					80	
Gly	Asn	Thr	Tyr	His	Leu	Gly	Leu	Arg	Pro	Gly	Pro	Glu	Leu	Ile	Gln
				85				90						95	
Lys	Ala	Asn	Gly	Leu	His	Gly	Phe	Met	Asn	Trp	Pro	His	Asn	Leu	Leu
		100						105					110		
Thr	Leu	Cys	Gly	Gly	Val	Ser	Leu	Asp	Ser	Gly	Gly	Phe	Gln	Met	Val
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Ser	Leu	Val	Ser	Leu	Ser	Glu	Val	Thr	Glu	Glu	Gly	Val	Arg	Phe	Arg
	130				135						140				
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 <211> 1419
 <212> DNA
 <213> Homo sapiens

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<211> 473

<212> PRT

<213> Homo sapiens

<400> 4014

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Thr	Pro	Ala	Leu	Gln	Pro	Leu	Ser	Arg	Ala	Ser	Pro	Ile	Pro	Gly	Thr
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Pro	Asp	Arg	Leu	Pro	Cys	Gln	Gln	Leu	Leu	Gln	Gln	Ala	Gln	Ala	Ala
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Ile	Pro	Arg	Ser	Thr	Ser	Phe	Asp	Arg	Lys	Leu	Pro	Asp	Gly	Thr	Arg
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Leu	Leu	Leu	Glu	His	Gln	Gly	Ser	Gly	Pro	Leu	Glu	Cys	Asp	Gly	Ala
	115					120						125			
Arg	Glu	Arg	Glu	Asp	Thr	Met	Glu	Ala	Ser	Arg	His	Pro	Glu	Thr	Lys
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Trp	His	Gly	Pro	Pro	Ser	Lys	Val	Leu	Gly	Ser	Tyr	Lys	Glu	Arg	Ala
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Leu	Gln	Lys	Asp	Gly	Ser	Cys	Lys	Asp	Ser	Pro	Asn	Lys	Leu	Ser	His

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Ile	Gly	Asp	Lys	Ser	Cys	Ser	Ser	Ser	His	Ser	Ser	Ser	Asn	Thr	Leu	Ser	
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		195					200					205					
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			245					250						255			
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Ser	Ser	Gly	Ser	Leu	Asp	Ser	Ser	Lys	Val	Tyr	Ile	Val	Ser	His	Ser		
			325					330						335			
Ser	Gly	Gln	Gln	Val	Pro	Gly	Ser	Met	Ser	Lys	Pro	Tyr	His	Arg	Gln		
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Gly	Ala	Val	Asn	Lys	Tyr	Val	Ile	Gly	Trp	Lys	Lys	Ser	Glu	Gly	Ser		
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Pro	Pro	Pro	Glu	Glu	Pro	Glu	Val	Thr	Glu	Cys	Pro	Gly	Met	Tyr	Ser		
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Glu	Leu	Asp	Val	Met	Ser	Thr	Ala	Thr	Gln	His	Gln	Thr	Val	Val	Gly		
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			405					410						415			
Lys	Leu	Met	Leu	Pro	Asp	Ser	Pro	Leu	Val	Glu	Glu	Gly	Arg	Arg	Lys		
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Phe	Ser	Phe	Tyr	Gly	Asn	Leu	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Arg	Thr		
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<211> 823

<212> DNA

<213> Homo sapiens

<400> 4015

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<210> 4016

<211> 95

<212> PRT

<213> Homo sapiens

<400> 4016

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Thr	Ser	Glu	Gln	Leu	Thr	Glu	Gln	Glu	Arg	Ala	Lys	Asp	Ala	Glu	Lys
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<211> 1521

<212> DNA

<213> Homo sapiens

<400> 4017

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<211> 1690

<212> PRT

<213> Homo sapiens

<400> 4024

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Trp	Gly	Asp	Lys	Lys	Val	Ile	Cys	Asn	Lys	Phe	Ile	Gln	Thr	Ser	Ala
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Val	Thr	Cys	Leu	Gln	Trp	Pro	Ala	Glu	Tyr	Ile	Ile	Val	Phe	Gly	Leu
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Thr	Ile	Tyr	Gly	Thr	Glu	Ser	Tyr	Val	Val	Ser	Leu	Thr	Thr	Asn	Cys
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Ser	Gly	Lys	Gly	Ile	Leu	Ser	Gly	His	Ala	Asp	Gly	Thr	Ile	Val	Arg
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Tyr	Phe	Phe	Asp	Asp	Glu	Gly	Ser	Gly	Glu	Ser	Gln	Gly	Lys	Leu	Val
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Asn	His	Pro	Cys	Pro	Pro	Tyr	Ala	Leu	Ala	Trp	Ala	Thr	Asn	Ser	Ile
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Val	Ala	Ala	Gly	Cys	Asp	Arg	Lys	Ile	Val	Ala	Tyr	Gly	Lys	Glu	Gly
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His	Met	Leu	Gln	Thr	Phe	Asp	Tyr	Ser	Arg	Asp	Pro	Gln	Glu	Arg	Glu
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Phe	Thr	Thr	Ala	Val	Ser	Ser	Pro	Gly	Gly	Gln	Ser	Val	Val	Leu	Gly
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Ser	Tyr	Asp	Arg	Leu	Arg	Val	Phe	Asn	Trp	Ile	Pro	Arg	Arg	Ser	Ile
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Trp	Glu	Glu	Ala	Lys	Pro	Lys	Glu	Ile	Thr	Asn	Leu	Tyr	Thr	Ile	Thr
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Ala	Leu	Ala	Trp	Lys	Arg	Asp	Gly	Ser	Arg	Leu	Cys	Val	Gly	Thr	Leu
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Cys	Gly	Gly	Val	Glu	Gln	Phe	Asp	Cys	Cys	Leu	Arg	Arg	Ser	Ile	Tyr
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Lys	Asn	Lys	Phe	Glu	Leu	Thr	Tyr	Val	Gly	Pro	Ser	Gln	Val	Ile	Val
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Lys	Asn	Leu	Ser	Ser	Gly	Thr	Arg	Val	Val	Leu	Lys	Ser	His	Tyr	Gly
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Tyr	Glu	Val	Glu	Glu	Val	Lys	Ile	Leu	Gly	Lys	Glu	Arg	Tyr	Leu	Val
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Leu	Ser	Glu	Ile	Ala	Trp	Gln	Gly	Ser	Gly	Gly	Asn	Glu	Lys	Tyr	Phe
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Phe	Glu	Asn	Glu	Asn	Val	Cys	Met	Ile	Phe	Asn	Ala	Gly	Glu	Leu	Thr
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Leu	Val	Glu	Tyr	Gly	Asn	Asn	Asp	Thr	Leu	Gly	Ser	Val	Arg	Thr	Glu
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Phe															

3208

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Met Tyr Thr Gln Ala Gly Arg Trp Glu Gln Ala His Lys Leu Ala Met						
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Lys Cys Met Arg Pro Glu Asp Val Ser Val Leu Tyr Ile Thr Gln Ala						
	900		905		910	
Gln Glu Met Glu Lys Gln Gly Lys Tyr Arg Glu Ala Glu Arg Leu Tyr						
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Val Thr Val Gln Glu Pro Asp Leu Ala Ile Thr Met Tyr Lys Lys His						
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Lys Leu Tyr Asp Asp Met Ile Arg Leu Val Gly Lys His His Pro Asp						
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Leu Leu Ser Asp Thr His Leu His Leu Gly Lys Glu Leu Glu Ala Glu						
	965		970		975	
Gly Arg Leu Gln Glu Ala Glu Tyr His Tyr Leu Glu Ala Gln Glu Trp						
	980		985		990	
Lys Ala Thr Val Asn Met Tyr Arg Ala Ser Gly Leu Trp Glu Glu Ala						
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Tyr Arg Val Ala Arg Thr Gln Gly Gly Ala Asn Ala His Lys His Val						
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Ala Tyr Leu Trp Ala Lys Ser Leu Gly Gly Glu Ala Ala Val Arg Leu						
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Leu Asn Lys Leu Gly Leu Leu Glu Ala Ala Val Asp His Ala Ala Asp						
	1045		1050		1055	
Asn Cys Ser Phe Glu Phe Ala Phe Glu Leu Ser Arg Leu Ala Leu Lys						
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His Lys Thr Pro Glu Val His Leu Lys Tyr Ala Met Phe Leu Glu Asp						
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Glu Gly Lys Phe Glu Glu Ala Glu Ala Glu Phe Ile Arg Ala Gly Lys						
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	1155		1160		1165	
Tyr Tyr Lys Glu Ala Gly Leu Trp Ser Asp Ala Leu Arg Ile Cys Lys						
	1170		1175		1180	
Asp Tyr Val Pro Ser Gln Leu Glu Ala Leu Gln Glu Tyr Glu Arg						
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Glu Ala Thr Lys Lys Gly Ala Arg Gly Val Glu Gly Phe Val Glu Gln						
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Tyr Leu Lys Val Arg Asp Ser Gly Asn Ser Gly Leu Ala Glu Lys Cys						
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Asn Met Glu Val Val Leu Ala Val Gly Pro Gln Leu Ile Gly Ile Gly						
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 Gly Val Asp Val Ile Ala Ala Leu Asp Leu Tyr Val Glu Gln Gly Gln
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 His Lys Tyr Val Ala Leu Tyr Ala Thr His Leu Ile Arg Glu Gly Ser
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<211> 908

<212> DNA

<213> Homo sapiens

<400> 4025

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<212> PRT

<213> Homo sapiens

<400> 4026

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Thr	Ser	Cys	Asn	Leu	Lys	Ser	His	Lys	Arg	Ile	His	Thr	Gly	Glu	Asn
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Leu	Thr	Gly	His	Asn	Cys	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys
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Lys	Glu	Cys	Gly	Lys	Thr	Phe	Met	Tyr	Asn	Ser	Ser	Leu	Ile	Gln	His

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Leu	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly		
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Lys	Ala	Phe	Arg	Gln	His	Ser	His	Leu	Val	Thr	His	Gln	Lys	Ile	His		
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Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Leu	Phe	Ile	Trp	Arg	Thr	Ala		
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Phe	Leu	Lys	His	Gln	Ser	Leu	His	Ala	Gly	Glu	Lys	Leu	Glu	Glu	Cys		
			195					200					205				
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Ile	His	Gln	Glu	Glu	Lys	Ala	Tyr	Trp	Cys	Asn	Gln	Cys	Gly	Arg	Ala		
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Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Xaa	Thr	Phe	Asn	Gln	Ser		
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Ser	Asp	Leu	Leu	Arg	His	His	Arg	Ile	His	Ser	Gly	Glu	Lys	Pro	Tyr		
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<211> 941

<212> DNA

<213> Homo sapiens

<400> 4027

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<210> 4028
 <211> 236
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 35 40 45
 Phe Gln Ser Thr Glu Val Lys His Val Thr Lys Val Glu Trp Ile Phe
 50 55 60
 Ser Gly Arg Arg Ala Lys Glu Glu Ile Val Phe Arg Tyr Tyr His Lys
 65 70 75 80
 Leu Arg Met Ser Ala Glu Tyr Ser Gln Ser Trp Gly His Phe Gln Asn
 85 90 95
 Arg Val Asn Leu Val Gly Asp Ile Phe Arg Asn Asp Gly Ser Ile Met
 100 105 110
 Leu Gln Gly Val Arg Glu Ser Asp Gly Gly Asn Tyr Thr Cys Ser Ile
 115 120 125
 His Leu Gly Asn Leu Val Phe Lys Lys Thr Ile Val Leu His Val Ser
 130 135 140
 Pro Glu Glu Pro Arg Thr Leu Val Thr Pro Ala Leu Arg Pro Leu
 145 150 155 160
 Val Leu Gly Gly Asn Gln Leu Val Ile Ile Val Gly Ile Val Cys Ala
 165 170 175
 Thr Ile Leu Leu Leu Pro Val Leu Ile Leu Ile Val Lys Lys Thr Cys
 180 185 190
 Gly Asn Lys Ser Ser Val Asn Ser Thr Val Leu Val Lys Asn Thr Lys
 195 200 205
 Lys Thr Asn Pro Glu Met Lys Glu Lys Pro Cys His Phe Glu Arg Cys
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 Glu Gly Glu Val Asn Thr Arg Phe Ser Leu Lys His
 225 230 235

<210> 4029
 <211> 909
 <212> DNA
 <213> Homo sapiens

<400> 4029

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 120
 ctacatgctg ctgctggtgc tgccgtgcgt ggcgctcagc gaggtcagca tgcagggcga
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 ccattcttctg cggaacaaac gtggtggcg cgcaccacaa ggctgcacc tnttcctgga
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 420
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 780
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 909

<210> 4030

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4030

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			20					25					30		
Arg	Gly	Pro	His	Leu	Leu	Leu	Leu	Leu	His	Ala	Ala	Ala	Gly	Ala	Ala
			35					40					45		
Val	Arg	Gly	Ala	Gln	Arg	Gly	Gln	His	Ala	Gly	Arg	Ala	His	Ser	Ala
			50					55					60		
Ala	Glu	Asp	Asp	Ala	Val	Pro	Gly	Ala	Gln	Ser	Arg	His	Arg	Gln	Cys
65				70						75				80	
Gly	Gly	Pro	Cys	Trp	Arg	Ala	Pro	Pro	Thr	Trp	Arg	Cys	Ser	Gly	Thr
				85					90					95	
Ala	Val	Ser	Arg	Pro	Ser	Ser	Ser	Ala	Lys	Thr	Trp	Trp	Arg	Ser	Pro
			100					105						110	
Pro	Arg	Pro	Ala	Pro	Xaa	Pro	Gly	Val	Pro	Pro	Pro	Gly	Ala	Arg	Leu

	115		120		125	
Pro	Xaa	Pro	Pro	Ala	Leu	Ser
	130		135		140	
Arg	Asn	Ser	Val	Pro	Pro	Pro
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Xaa	Pro	Pro	His	Val	Leu	Ala
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<210> 4031

<211> 1406

<212> DNA

<213> Homo sapiens

<400> 4031

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120
gagtttataaa aggaggagat gaggaagcta caaaaggaaac gtaaagtttt tgaaaagtat
180
actacagctg caagaacttt tccagataaa aaggaacgtg aagaaatata gactttataaa
240
cagcaaatag cagattttacg ggaagatttg aaaagaaagg agaccaaata gtcaagtaca
300
cacagccgtc tcagaagcca gatacaaatg ttagtcagag agaacacaga cctccgggaa
360
gaaataaaaag tgatggaaaag attccgactg gatgcctgga agagagcaga agccatagag
420
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480
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720
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780
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840
atgccagacc aaagagtgat ctactactat gcagctgccc agaccactca cagacatac
900
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ggaagaaaag aaatcacgtt tcttgaccag actgttataaa acttatttcc tgatggacaa
1020
gaagaaaagca ttttcccaga tgggtacaatt gtcagagtac aacgtgatgg caacaaactc
1080
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1140
ccagatggca ctgttaaaac cgtatatgca aacggtcac c aagaaacgaa gtacagatcc
1200

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ggtcggataa gagttaagga caaggagggt aatgtgctaa tggacacgga gctgtgacga
 1260
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 1320
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 1406

<210> 4032

<211> 418

<212> PRT

<213> Homo sapiens

<400> 4032

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Ala	Leu	Glu	Lys	Leu	Arg	Lys	Glu	Ile	Ala	Gly	Phe	Glu	Gln	Gln	Lys
			20					25					30		
Ala	Lys	Glu	Leu	Ala	Arg	Ile	Glu	Glu	Phe	Lys	Lys	Glu	Glu	Met	Arg
			35					40					45		
Lys	Leu	Gln	Lys	Glu	Arg	Lys	Val	Phe	Glu	Lys	Tyr	Thr	Thr	Ala	Ala
			50				55				60				
Arg	Thr	Phe	Pro	Asp	Lys	Lys	Glu	Arg	Glu	Glu	Ile	Gln	Thr	Leu	Lys
					70						75				80
Gln	Gln	Ile	Ala	Asp	Leu	Arg	Glu	Asp	Leu	Lys	Arg	Lys	Glu	Thr	Lys
				85					90					95	
Trp	Ser	Ser	Thr	His	Ser	Arg	Leu	Arg	Ser	Gln	Ile	Gln	Met	Leu	Val
			100					105					110		
Arg	Glu	Asn	Thr	Asp	Leu	Arg	Glu	Glu	Ile	Lys	Val	Met	Glu	Arg	Phe
			115					120				125			
Arg	Leu	Asp	Ala	Trp	Lys	Arg	Ala	Glu	Ala	Ile	Glu	Ser	Ser	Leu	Glu
			130				135				140				
Val	Glu	Lys	Lys	Asp	Lys	Leu	Ala	Asn	Thr	Ser	Val	Arg	Phe	Gln	Asn
				145			150				155				160
Ser	Gln	Ile	Ser	Ser	Gly	Thr	Gln	Val	Glu	Lys	Tyr	Lys	Lys	Asn	Tyr
				165				170						175	
Leu	Pro	Met	Gln	Gly	Asn	Pro	Pro	Arg	Arg	Ser	Lys	Ser	Ala	Pro	Pro
			180					185					190		
Arg	Asp	Leu	Gly	Asn	Leu	Asp	Lys	Gly	Gln	Ala	Ala	Ser	Pro	Arg	Glu
			195				200					205			
Pro	Leu	Glu	Pro	Leu	Asn	Phe	Pro	Asp	Pro	Glu	Tyr	Lys	Glu	Glu	Glu
			210				215					220			
Glu	Asp	Gln	Asp	Ile	Gln	Gly	Glu	Ile	Ser	His	Pro	Asp	Gly	Lys	Val
				225			230				235				240
Glu	Lys	Val	Tyr	Lys	Asn	Gly	Cys	Arg	Val	Ile	Leu	Phe	Pro	Asn	Gly
				245					250					255	
Thr	Arg	Lys	Glu	Val	Ser	Ala	Asp	Gly	Lys	Thr	Ile	Thr	Val	Thr	Phe
			260					265					270		
Phe	Asn	Gly	Asp	Val	Lys	Gln	Val	Met	Pro	Asp	Gln	Arg	Val	Ile	Tyr
			275				280					285			
Tyr	Tyr	Ala	Ala	Ala	Gln	Thr	Thr	His	Thr	Thr	Tyr	Pro	Glu	Gly	Leu
			290				295					300			
Glu	Val	Leu	His	Phe	Ser	Ser	Gly	Gln	Ile	Glu	Lys	His	Tyr	Pro	Asp


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<400> 4034
Met Asn Thr Gly Ile Phe Pro Gly Trp Leu Leu Thr Ala Glu Gln Arg
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Lys Ser Ile Leu Gly Ala Cys Tyr Gly Gly Ser Phe Ile Gln Phe Thr
 20           25           30
Thr Ser Thr Ala Gly Pro Gln Trp Leu Pro Phe Ser Pro Thr Arg Ala
 35           40           45
Leu Gly Gln Ala Ser Ser Ala Pro Val Gly Arg Leu Pro Arg Lys Thr

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      50              55              60
Gln Ala Pro Gly Ala Ala Cys Gln Asp Gln Thr Gly Gly Leu Ala Pro
65              70              75              80
Pro Pro Ala Met Cys Gly Glu Arg Ala Ser Pro Ser Gln Ser
      85              90

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<210> 4035
 <211> 343
 <212> DNA
 <213> Homo sapiens

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 120
 tcctatggga gggacaaact ctcagaaaat agcaagagta ttttggaaac ctatctgagg
 180
 tataaacact cagaacctca tagcagtgtt caggaatcct atgtgagggg caaacattca
 240
 gaccacagca ggagcattct agaatcctat ttgaggaaca aacattcaga caatcgtagc
 300
 agtgtttctgg aatccttttt ttttttgaag ctttcaatct ctt
 343

<210> 4036
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 4036
 Xaa Leu Asn Ser Ser Val Met Glu Phe His Val Arg His Lys His Ser
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 Asp Asn Pro Ser Asn Val Leu Glu Ser Tyr Val Arg Asp Lys His Ser
 20 25 30
 Asp Pro Ser Ser Asn Val Leu Glu Ser Tyr Gly Arg Asp Lys Leu Ser
 35 40 45
 Glu Asn Ser Lys Ser Ile Leu Glu Ser Tyr Leu Arg Tyr Lys His Ser
 50 55 60
 Glu Pro His Ser Ser Val Gln Glu Ser Tyr Val Arg Asp Lys His Ser
 65 70 75 80
 Asp His Ser Arg Ser Ile Leu Glu Ser Tyr Leu Arg Asn Lys His Ser
 85 90 95
 Asp Asn Arg Ser Ser Val Leu Glu Ser Phe Phe Phe Leu Lys Leu Ser
 100 105 110
 Ile Ser

<210> 4037
 <211> 741
 <212> DNA
 <213> Homo sapiens

<400> 4037

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 120
 ggaggagaag gggttggtct tgctgtctca gggcggcaga ggcagaagag aatctgagca
 180
 tacgtggacc tgtagccagg tgggcataga taaaaggaaa tattgtttgc cagtcacctgc
 240
 tggaatgatg cctttacaca tctgtctgat ctgattgctc cactgttttc tgactttctt
 300
 tccctttcca gggttctagc ctgttcatct agcccatga tggctgtgga catcgagtac
 360
 agatacaact gcatggctcc ttccttgccg caagagaggt ttgcctttaa gatctcacca
 420
 aagcccagca aaccactgag gccttgattt cagctgagca gcaagaatga agccagtggg
 480
 atgggtggccc cggctgtcca ggagaagaag gtgaaaaagc ggggtgtcctt cgcagacaac
 540
 caggggctgg ccctgacaat ggtcaaagtg ttctcggaat tcgatgaccc gctagatatg
 600
 ccattcaaca tcaccgagct cctagacaac attgtgagct tgacgacagc agagagcgag
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 741

<210> 4038

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4038

Met	Ala	Val	Asp	Ile	Glu	Tyr	Arg	Tyr	Asn	Cys	Met	Ala	Pro	Ser	Leu
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Arg	Gln	Glu	Arg	Phe	Ala	Phe	Lys	Ile	Ser	Pro	Lys	Pro	Ser	Lys	Pro
			20					25					30		
Leu	Arg	Pro	Cys	Ile	Gln	Leu	Ser	Ser	Lys	Asn	Glu	Ala	Ser	Gly	Met
		35					40					45			
Val	Ala	Pro	Ala	Val	Gln	Glu	Lys	Lys	Val	Lys	Lys	Arg	Val	Ser	Phe
	50					55					60				
Ala	Asp	Asn	Gln	Gly	Leu	Ala	Leu	Thr	Met	Val	Lys	Val	Phe	Ser	Glu
65					70					75					80
Phe	Asp	Asp	Pro	Leu	Asp	Met	Pro	Phe	Asn	Ile	Thr	Glu	Leu	Leu	Asp
				85					90					95	
Asn	Ile	Val	Ser	Leu	Thr	Thr	Ala	Glu	Ser	Glu	Ser	Phe	Val	Leu	Asp
			100					105					110		
Phe	Ser	Gln	Pro	Ser	Ala	Asp	Tyr	Leu	Asp	Phe	Arg	Asn	Arg	Leu	Gln
		115					120					125			
Ala	Asp	His	Val	Cys	Leu										
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<210> 4039

<211> 1503

<212> DNA

<213> Homo sapiens

<400> 4039

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240
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360
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420
cggtcatgtg cgtgctctca ctccacgtgg tcttcggcat cttcttcttc ggctgcaatc
480
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720
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780
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840
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900
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960
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1260
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1380
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1500

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1503

<210> 4040
<211> 100
<212> PRT
<213> Homo sapiens

<400> 4040
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Ser Leu Arg Val Ser Ala Gln Pro Gly Thr Cys Ser Ser Ser Ala Ala
35 40 45
Ala Phe Pro Pro Leu Gly Pro Ala Pro Leu Ala Ala Pro Ala Arg Ser
50 55 60
Cys Asp Glu Ser Gly Pro Arg Gln Pro Asp Gly Arg Gly Gly Pro Ser
65 70 75 80
Trp Pro Thr Ala Ala Arg Arg Trp Ser Glu Pro Cys Ala Ala Ala Pro
85 90 95
Arg Arg Pro Trp
100

<210> 4041
<211> 573
<212> DNA
<213> Homo sapiens

<400> 4041
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120
tgtgttgcca attcagatga acagcttggt gagatgtttc tggaagaaaa aatcccctcg
180
atttctgatt taaagctagc aattcgaaga gctactctga aaagatcatt tactcctgta
240
tttttgggaa ggccttgaa gaacaaagga gttagcctc ttttagatgc tgttttagaa
300
tacctcccaa atccatctga agtccagaac tatgctattc tcaataaaga ggatgactca
360
aaagagaaaa ccaaaatcct aatgaactcc agtagagaca attcccaccc atttgtaggc
420
ctggctttta aactggaggt aggtcgattt ggacaattaa cttatgttcg cagttatcag
480
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caacggctgg ctgcgatgca tgccgacatg atg
573

<210> 4042
<211> 191
<212> PRT

<213> Homo sapiens

<400> 4042

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Ile Val Arg Tyr Gly Glu Ile Pro Ala Glu Leu Arg Ala Ala Thr
      20           25           30
Asp His Arg Gln Glu Leu Ile Glu Cys Val Ala Asn Ser Asp Glu Gln
      35           40           45
Leu Gly Glu Met Phe Leu Glu Glu Lys Ile Pro Ser Ile Ser Asp Leu
 50           55           60
Lys Leu Ala Ile Arg Arg Ala Thr Leu Lys Arg Ser Phe Thr Pro Val
65           70           75           80
Phe Leu Gly Ser Ala Leu Lys Asn Lys Gly Val Gln Pro Leu Leu Asp
      85           90           95
Ala Val Leu Glu Tyr Leu Pro Asn Pro Ser Glu Val Gln Asn Tyr Ala
      100          105          110
Ile Leu Asn Lys Glu Asp Asp Ser Lys Glu Lys Thr Lys Ile Leu Met
      115          120          125
Asn Ser Ser Arg Asp Asn Ser His Pro Phe Val Gly Leu Ala Phe Lys
      130          135          140
Leu Glu Val Gly Arg Phe Gly Gln Leu Thr Tyr Val Arg Ser Tyr Gln
145          150          155          160
Gly Glu Leu Lys Lys Gly Asp Thr Ile Tyr Asn Thr Arg Thr Arg Lys
      165          170          175
Lys Val Arg Leu Gln Arg Leu Ala Arg Met His Ala Asp Met Met
      180          185          190

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<210> 4043

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4043

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120
ctcccaaaaa aagaccctaa agttaaggt gtccaatcag cagctgtaca agcttttctt
180
aaaaggaaaag aagaggagct gagacgaaaa gccttagagg agaaaaggag aaaagaggaa
240
ctagtgaaaa agcgaattga gctcaaaccat gacaagaaaag caagagctat ggccaagagg
300
acaaaggata atttccatgg ttacaatggg attcctattg aggaaaagtc aaagaagagg
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420
aatgaattcc tcgagtacaa tcacgcagag tcagagcagg agtatgagga agagcaagaa
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cctcccaaag ttgaaagcaa accaaaggtc tcccttaaag gtgccccacc acctatgaac
540
ttcactgatt tactcaggct ggctgagaaa aagcagtttg aaccagtgga aatcaaggta
600

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gtgaagaaat cagaagagcg acctatgacc gcagaagaac ttagggagcg agaattcctt
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 aaaaaggcac ctctcggacg gaag
 744

<210> 4044
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 4044
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 35 40 45
 Lys Glu Glu Leu Val Lys Lys Arg Ile Glu Leu Lys His Asp Lys Lys
 50 55 60
 Ala Arg Ala Met Ala Lys Arg Thr Lys Asp Asn Phe His Gly Tyr Asn
 65 70 75 80
 Gly Ile Pro Ile Glu Glu Lys Ser Lys Lys Arg Gln Ala Thr Glu Ser
 85 90 95
 His Thr Ser Gln Gly Thr Asp Arg Glu Tyr Glu Met Glu Glu Glu Asn
 100 105 110
 Glu Phe Leu Glu Tyr Asn His Ala Glu Ser Glu Gln Glu Tyr Glu Glu
 115 120 125
 Glu Gln Glu Pro Pro Lys Val Glu Ser Lys Pro Lys Val Ser Leu Lys
 130 135 140
 Gly Ala Pro Pro Pro Met Asn Phe Thr Asp Leu Leu Arg Leu Ala Glu
 145 150 155 160
 Lys Lys Gln Phe Glu Pro Val Glu Ile Lys Val Val Lys Lys Ser Glu
 165 170 175
 Glu Arg Pro Met Thr Ala Glu Glu Leu Arg Glu Arg Glu Phe Leu Glu
 180 185 190
 Arg Lys His Arg Arg Lys Lys Leu Glu Thr Asp Gly Lys Leu Pro Pro
 195 200 205
 Thr Val Ser Lys Lys Ala Pro Leu Gly Arg Lys
 210 215

<210> 4045
 <211> 2217
 <212> DNA
 <213> Homo sapiens

<400> 4045
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 120
 aattgaaaaa aacttagaat tttaaagctg agaaagagtt atcgctgtga tgatttttgt
 180

gttaatgaca ccaagctggg actggtacag aaagtcagag aacacttaca gaacttggaa
240
aactcagctt tcacagctga caggcataag aaaagaaaac ttttggaaaa ctcaacacta
300
aacagcaagt tattaagaat aaatggaagc accactgccca tttgtgccac aggccttcgg
360
aatttgggga acacatgttt catgaatgcc atccttcagt cactcagtaa cattgagcag
420
ttttgctgtt atttcaaaga actgcccgcc gtggagttaa ggaatgggaa aacagcagga
480
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720
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<212> PRT

<213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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720

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 Lys Val Tyr Val Gln Leu Trp Arg Arg Leu Lys Ala Tyr Asn Arg Val
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 Ile Phe Val Gln Asn Cys Pro Asp Thr Ala Lys Lys Leu Glu Lys Asn
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<211> 403

<212> PRT

<213> Homo sapiens

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Cys	Asn	Lys	Phe	Ile	Ala	Tyr	Ser	Thr	Val	Phe	Glu	Asp	Val	Val	Asp
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Phe	Lys	Lys	Asn	Leu	Phe	Glu	Met	Ala	Ile	Asn	Leu	Ala	Lys	Ser	Gln
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			165						170					175	
Arg	Thr	Ile	Gly	Lys	Leu	Glu	Pro	Ser	Tyr	Val	Ile	Arg	Lys	Phe	Leu
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275	280	285
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305	310	315
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325	330	335
Pro Ser Leu Glu Gly Arg	Ser Asp Arg Glu Ala	Pro Gly Cys Arg Ala
340	345	350
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355	360	365
Lys Ala Phe Leu Glu His	Met Ser Glu Val Gln	Pro Asp Ser Pro Gln
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 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 4052

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<211> 2434

<212> PRT

<213> Homo sapiens

<400> 4056

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Cys	Phe	Ala	Ser	Leu	Ala	Asp	Arg	Phe	Thr	Arg	Arg	Gly	Val	Asp	Pro	35	40	45	
Ala	Pro	Leu	Ala	Lys	His	Gly	Leu	Thr	Glu	Glu	Leu	Leu	Ser	Arg	Met	50	55	60	
Ala	Ala	Ala	Gly	Gly	Thr	Val	Ser	Gly	Pro	Ser	Ser	Ala	Cys	Lys	Pro	65	70	75	80
Gly	Arg	Ser	Thr	Thr	Gly	Ala	Pro	Ser	Thr	Thr	Ala	Asp	Ser	Lys	Leu	85	90	95	
Ser	Asn	Gln	Val	Ser	Thr	Ile	Val	Ser	Leu	Leu	Ser	Thr	Leu	Cys	Arg	100	105	110	
Gly	Ser	Pro	Val	Val	Thr	His	Asp	Leu	Leu	Arg	Ser	Glu	Leu	Pro	Asp	115	120	125	
Ser	Ile	Glu	Ser	Ala	Leu	Gln	Gly	Asp	Glu	Arg	Cys	Val	Leu	Asp	Thr	130	135	140	
Met	Arg	Leu	Val	Asp	Leu	Leu	Leu	Val	Leu	Leu	Phe	Glu	Gly	Arg	Lys	145	150	155	160
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Cys	Ile	Arg	Ser	Lys	Asp	Thr	Asp	Ala	Leu	Ile	Asp	Ala	Ile	Asp	Thr	195	200	205	
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3239

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	2130	2135
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Pro Ala Trp Leu Asn Gly Ile Leu Thr Trp Glu Asp Phe Glu Leu Val		2160
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Asn Pro His Arg Ala Arg Phe Leu Lys Glu Ile Lys Asp Leu Ala Ile		2175
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Lys Arg Arg Gln Ile Leu Ser Asn Lys Gly Leu Ser Glu Asp Glu Lys		2190
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Pro Pro Leu Ser Ile Glu Asp Leu Gly Leu Asn Phe Gln Phe Cys Pro		2225
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Ser Ser Arg Ile Tyr Gly Phe Thr Ala Val Asp Leu Lys Pro Ser Gly		2240
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Glu Asp Glu Met Ile Thr Met Asp Asn Ala Glu Glu Tyr Val Asp Leu		2255
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	2275	2280
Phe Arg Asp Gly Phe Asn Lys Val Phe Pro Met Glu Lys Leu Ser Ser		2285
	2290	2295
Phe Ser His Glu Glu Val Gln Met Ile Leu Cys Gly Asn Gln Ser Pro		2300
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Tyr Thr Arg Asp Ser Pro Gly Phe Leu Arg Phe Val Arg Val Leu Cys		2335
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Cys Ser Thr Leu Pro Pro Gly Gly Leu Ala Asn Leu His Pro Arg Leu		2365
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Asn Thr Cys Val His Tyr Leu Lys Leu Pro Glu Tyr Ser Ser Glu Glu		2400
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<211> 533

<212> DNA

<213> Homo sapiens

<400> 4057

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<213> Homo sapiens

<400> 4058

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Phe	Ser	Asn	Ile	Ser	Ser	Ile	Tyr	Gln	Phe	His	Ser	Gln	Phe	Phe	Leu
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Tyr	Val	Lys	Asn	Phe	Glu	Arg	Ala	Ala	Glu	Leu	Leu	Ala	Thr	Trp	Thr
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<211> 714

<212> PRT

<213> Homo sapiens

<400> 4060

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Pro	Thr	Arg	Ala	Gly	Asn	Ser	Thr	Pro	Arg	Met	Gln	Phe	Val	Ser	Thr
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Arg	Pro	Gln	Pro	Gln	Gln	Leu	Gly	Ile	Gln	Gly	Leu	Gly	Leu	Asp	Ser
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Gln	Glu	Pro	Ala	Leu	Arg	Gly	Glu	Met	Ala	Glu	Gly	Met	Pro	Pro	Met
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Ala	Ala	Ile	Gln	Ala	Met	Glu	Arg	Lys	Ile	Glu	Ser	Gln	Ala	Ala	His

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Leu	Leu	Ser	Leu	Glu	Gly	Gln	Thr	Gly	Met	Ala	Glu	Lys	Lys	Leu
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Asp	Cys	Glu	Lys	Thr	Ala	Val	Glu	Phe	Gly	Asn	Gln	Leu	Glu	Lys
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Trp	Ala	Val	Leu	Gly	Thr	Leu	Leu	Gln	Glu	Tyr	Gly	Leu	Leu	Gln
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Leu	Arg	Leu	Pro	Pro	Gly	Ser	Lys	Gly	Glu	Ala	Pro	Lys	Val	Pro
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Thr	Phe	Val	Asp	Ile	Ala	Val	Tyr	Phe	Ser	Glu	Asp	Glu	Trp	Lys
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Leu	Asp	Glu	Trp	Gln	Lys	Glu	Leu	Tyr	Asn	Asn	Leu	Val	Lys	Glu
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Tyr	Lys	Thr	Leu	Met	Ser	Leu	Asp	Ala	Glu	Gly	Ser	Val	Pro	Lys
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Gln	Arg	His	Pro	Glu	Glu	Arg	Glu	Ile	Pro	Met	Asp	Pro	Glu	Ala
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Tyr Thr Cys Gly Glu Cys Gly Lys Ser Phe Arg Tyr Lys Glu Ser Leu
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<210> 4061

<211> 519

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 <213> Homo sapiens

<400> 4064

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Gln Ala Gln His Glu Ser Arg Thr Phe Ala Val Tyr Leu Asn Ser Thr
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Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr Leu Asn Glu Tyr Asn Gly
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Ser Tyr Val Pro Pro Gly Trp Lys Glu Trp Val Gly Leu Leu Lys Asn
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His Gly Ser Asp Tyr Ser Lys Asp Tyr Leu Thr Asp Leu Ile Thr Asn
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Asp Ser Val Ser Phe Phe Arg Thr Ser Lys Lys Met Tyr Pro His Arg
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Pro Val Leu Met Val Ile Ser His Ala Ala Pro His Gly Pro Glu Asp
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Ser Ala Pro Gln Tyr Ser Arg Leu Phe Pro Asn Ala Ser Gln His Ile
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Thr Pro Ser Tyr Asn Tyr Ala Pro Asp Pro Asp Lys His Trp Ile Met
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Arg Tyr Thr Gly Pro Met Lys Pro Ile His Met Glu Phe Thr Asn Met
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Leu Gln Arg Lys Arg Leu Gln Thr Leu Met Ser Val Asp Asp Ser Met
225          230          235          240
Glu Thr Ile Tyr Asn Met Leu Val Glu Thr Gly Glu Leu Asp Asn Thr
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Tyr Ile Val Tyr Thr Ala Asp His Gly Tyr His Ile Gly Gln Phe Gly
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Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys Ser Met Pro Gly		
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Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln Thr Ala Pro Phe		
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690	695	700
Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn Phe Leu Phe Cys		
705	710	715
Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu Asn Thr Asp Pro		
725	730	735
Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg Asp Val Leu Asn		
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Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Lys Gly Tyr Lys		
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Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly Leu Lys Asp Gly		
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3254

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Lys	Gly	Tyr	Glu	Glu	Asp	Val	Gly	Arg	Met	Thr	Met	Ile	Arg	Val	Val		
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Ser	His	Thr	Ser	Val	Pro	Leu	Leu	Lys	Asn	Pro	Asp	Tyr	Phe	Phe			
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<210> 4067

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<212> DNA

<213> Homo sapiens

<400> 4067

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<210> 4068

<211> 521

<212> PRT

<213> Homo sapiens

<400> 4068

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			20					25					30		
Arg	Lys	Ile	Pro	Cys	Asp	Val	Thr	Glu	Ala	Glu	Ile	Ile	Ser	Leu	Gly
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		100					105					110			
Gln	Ala	Arg	Ala	Gln	Ala	Ala	Leu	Gln	Ala	Val	Ser	Ala	Val	Gln	Ser
	115						120					125			
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          435          440          445
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          450          455          460
Ile Glu Ala Gly Cys Ser Val Lys Ala Phe Lys Phe Phe Gln Lys Asp
465          470          475          480
Arg Lys Met Ala Leu Ile Gln Leu Gly Ser Val Glu Glu Ala Ile Gln
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<211> 714

<212> DNA

<213> Homo sapiens

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		20						25					30		
Leu	Tyr	Thr	Ile	Phe	Ile	Val	Ala	Thr	Lys	Ile	Thr	Met	Met	Thr	Thr
		35					40					45			
Gln	Thr	Ser	Thr	Met	Thr	Phe	Ala	Pro	Phe	Glu	Asp	Thr	Leu	Ser	Trp
	50					55				60					
Met	Leu	Phe	Gly	Trp	Gln	Gln	Pro	Phe	Ser	Ser	Cys	Glu	Lys	Lys	Ser
65					70					75				80	
Glu	Ala	Lys	Ser	Pro	Ser	Asn	Gly	Val	Gly	Ser	Leu	Ala	Ser	Lys	Pro
			85					90						95	
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<210> 4071

<211> 601

<212> DNA

<213> Homo sapiens

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 Gln Ala Leu Lys Ala Arg Met Thr Ser Phe His Arg Phe Phe Phe Thr
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 Ile Gly Leu Glu Val Thr Ser Gly His Ala Gln Phe Leu Asp Leu Val
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 Ser Glu Val Asp Arg Val Met Glu Glu Phe Asn Leu Thr Thr Phe Tyr
 100 105 110
 Gln Asp Pro Ser Phe His Leu Ser Leu Ala Trp Cys Val Gly Asp Ala
 115 120 125
 Arg Leu Gln Leu Glu Gly Gln Cys Leu Gln Glu Leu Gln Ala Ile Val
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<212> DNA

<213> Homo sapiens

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<210> 4074
 <211> 456
 <212> PRT
 <213> Homo sapiens

<400> 4074
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 35 40 45
 Ser Thr Met Pro Ser Gln Thr Val Leu Pro Pro Glu Pro Val Gln Leu
 50 55 60
 Cys Lys Ser Glu Gln Arg Pro Ser Ser Leu Pro Val Gly Pro Val Leu
 65 70 75 80
 Ala Thr Leu Gly His His Gln Thr Pro Thr Pro Asn Ser Thr Gly Ser
 85 90 95
 Gly His Ser Pro Pro Ser Ser Ser Leu Thr Ser Pro Ser His Val Asn
 100 105 110
 Leu Ser Pro Asn Thr Val Pro Glu Phe Ser Tyr Ser Ser Ser Glu Asp
 115 120 125
 Glu Phe Tyr Asp Ala Asp Glu Phe His Gln Ser Gly Ser Ser Pro Lys
 130 135 140
 Arg Leu Ile Asp Ser Ser Gly Ser Ala Ser Val Leu Thr His Ser Ser
 145 150 155 160
 Ser Gly Asn Ser Leu Lys Arg Pro Asp Thr Thr Glu Ser Leu Asn Ser
 165 170 175
 Ser Leu Ser Asn Gly Thr Ser Asp Ala Asp Leu Phe Asp Ser His Asp
 180 185 190
 Asp Arg Asp Asp Asp Ala Glu Ala Gly Ser Val Glu Glu His Lys Ser
 195 200 205
 Val Ile Met His Leu Leu Ser Gln Val Arg Leu Gly Met Asp Leu Thr
 210 215 220
 Lys Val Val Leu Pro Thr Phe Ile Leu Glu Arg Arg Ser Leu Leu Glu
 225 230 235 240
 Met Tyr Ala Asp Phe Phe Ala His Pro Asp Leu Phe Val Ser Ile Ser
 245 250 255
 Asp Gln Lys Asp Pro Lys Asp Arg Met Val Gln Val Val Lys Trp Tyr

Leu	Ser	Ala	Phe	His	Ala	Gly	Arg	Lys	Gly	Ser	Val	Ala	Lys	Lys	Pro
		275					280					285			
Tyr	Asn	Pro	Ile	Leu	Gly	Glu	Ile	Phe	Gln	Cys	His	Trp	Thr	Leu	Pro
	290					295					300				
Asn	Asp	Thr	Glu	Glu	Asn	Thr	Glu	Leu	Val	Ser	Glu	Gly	Pro	Val	Pro
305					310					315					320
Trp	Val	Ser	Lys	Asn	Ser	Val	Thr	Phe	Val	Ala	Glu	Gln	Val	Ser	His
			325						330					335	
His	Pro	Pro	Ile	Ser	Ala	Phe	Tyr	Ala	Glu	Cys	Phe	Asn	Lys	Lys	Ile
			340					345					350		
Gln	Phe	Asn	Ala	His	Ile	Trp	Thr	Lys	Ser	Lys	Phe	Leu	Gly	Met	Ser
		355					360					365			
Ile	Gly	Val	His	Asn	Ile	Gly	Gln	Gly	Cys	Val	Ser	Cys	Leu	Asp	Tyr
	370					375					380				
Asp	Glu	His	Tyr	Ile	Leu	Thr	Phe	Pro	Asn	Gly	Tyr	Gly	Arg	Ser	Ile
385					390					395					400
Leu	Thr	Val	Pro	Trp	Val	Glu	Leu	Gly	Gly	Glu	Cys	Asn	Ile	Asn	Cys
				405					410					415	
Ser	Lys	Thr	Gly	Tyr	Ser	Ala	Asn	Ile	Ile	Phe	His	Thr	Lys	Pro	Phe
			420					425					430		
Tyr	Gly	Gly	Lys	Lys	His	Arg	Ile	Thr	Ala	Glu	Ile	Phe	Ser	Pro	Asn
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<211> 2492
<212> DNA
<213> Homo sapiens
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180
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240
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300
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420
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480
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aatagtaaga ccagcaatac cctagagaag gatttagatc tgttggcctc tgttccatcc
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660

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2280

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<210> 4076

<211> 410

<212> PRT

<213> Homo sapiens

<400> 4076

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Ala	Gly	Ile	His	Arg	Asn	Leu	Gly	Val	His	Ile	Ser	Arg	Val	Lys	Ser	35	40	45	
Val	Asn	Leu	Asp	Gln	Trp	Thr	Gln	Glu	Gln	Ile	Gln	Cys	Met	Gln	Glu	50	55	60	
Met	Gly	Asn	Gly	Lys	Ala	Asn	Arg	Leu	Tyr	Glu	Ala	Tyr	Leu	Pro	Glu	65	70	75	80
Thr	Phe	Arg	Arg	Pro	Gln	Ile	Asp	Pro	Ala	Val	Glu	Gly	Phe	Ile	Arg	85	90	95	
Asp	Lys	Tyr	Glu	Lys	Lys	Lys	Tyr	Met	Asp	Arg	Ser	Leu	Asp	Ile	Asn	100	105	110	
Ala	Phe	Arg	Lys	Glu	Lys	Asp	Asp	Lys	Trp	Lys	Arg	Gly	Ser	Glu	Pro	115	120	125	
Val	Pro	Glu	Lys	Lys	Leu	Glu	Pro	Val	Val	Phe	Glu	Lys	Val	Lys	Met	130	135	140	
Pro	Gln	Lys	Lys	Glu	Asp	Pro	Gln	Leu	Pro	Arg	Lys	Ser	Ser	Pro	Lys	145	150	155	160
Ser	Thr	Ala	Pro	Val	Met	Asp	Leu	Leu	Gly	Leu	Asp	Ala	Pro	Val	Ala	165	170	175	
Cys	Ser	Ile	Ala	Asn	Ser	Lys	Thr	Ser	Asn	Thr	Leu	Glu	Lys	Asp	Leu	180	185	190	
Asp	Leu	Leu	Ala	Ser	Val	Pro	Ser	Pro	Ser	Ser	Ser	Gly	Ser	Arg	Lys	195	200	205	
Val	Val	Gly	Ser	Met	Pro	Thr	Ala	Gly	Ser	Ala	Gly	Ser	Val	Pro	Glu	210	215	220	
Asn	Leu	Asn	Leu	Phe	Pro	Glu	Pro	Gly	Ser	Lys	Ser	Glu	Glu	Ile	Gly	225	230	235	240
Lys	Lys	Gln	Leu	Ser	Lys	Asp	Ser	Ile	Leu	Ser	Leu	Tyr	Gly	Ser	Gln	245	250	255	
Thr	Pro	Gln	Met	Pro	Thr	Gln	Ala	Met	Phe	Met	Ala	Pro	Ala	Gln	Met	260	265	270	
Ala	Tyr	Pro	Thr	Ala	Tyr	Pro	Ser	Phe	Pro	Gly	Val	Thr	Pro	Pro	Asn	275	280	285	
Ser	Ile	Met	Gly	Ser	Met	Met	Pro	Pro	Pro	Val	Gly	Met	Val	Ala	Gln	290	295	300	
Pro	Gly	Ala	Ser	Gly	Met	Val	Ala	Pro	Met	Ala	Met	Pro	Ala	Gly	Tyr				


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305          310          315          320
Met Gly Gly Met Gln Ala Ser Met Met Gly Val Pro Asn Gly Met Met
          325          330          335
Thr Thr Gln Gln Ala Gly Tyr Met Ala Gly Met Ala Ala Met Pro Gln
          340          345          350
Thr Val Tyr Gly Val Gln Pro Ala Gln Gln Leu Gln Trp Asn Leu Thr
          355          360          365
Gln Met Thr Gln Gln Met Ala Gly Met Asn Phe Tyr Gly Ala Asn Gly
          370          375          380
Met Met Asn Tyr Gly Gln Ser Met Ser Gly Gly Asn Gly Gln Ala Ala
385          390          395          400
Asn Gln Thr Leu Ser Pro Gln Met Trp Lys
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<210> 4077

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4077

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<210> 4078

<211> 194

<212> PRT

<213> Homo sapiens

<400> 4078

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Ser Met Arg Tyr Leu Ala Leu Met Val Ser Arg Pro Val Leu Arg Leu

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<210> 4079
<211> 783
<212> DNA
<213> Homo sapiens
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420
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660
ctgttatgac ctcatctctc cgatgaggaa gccagggctc agagaagttg aaggcatgag
720

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 780
 nta
 783

<210> 4080
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 4080
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 35 40 45
 Glu Ala Leu His Ala Gln Pro Gly Glu Gln Gly Trp Met Gly Leu Lys
 50 55 60
 Arg Ala Gln Pro Ser Pro Glu Arg Thr Leu His Ser Asn Leu Pro Gln
 65 70 75 80
 Ser Trp Gly Lys His Glu Gly Cys Pro Ser Thr Glu Val Asn Pro Gly
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 His Ala Arg Thr Lys
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<210> 4081
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 4081
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 180
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<210> 4082
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 4082

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Val Arg Pro Val Gln Asn Leu Ala Leu Gly Lys Glu Glu Leu Ile Gly
      35               40               45
Thr Met Glu Gln Ile Phe Met Asn Val Ala Ile Phe Glu Asp Glu Val
      50               55               60
Phe Ala Gly Val Thr Thr His Gln Glu Leu Phe Pro His Ser Leu Leu
      65               70               75               80
Ser Val Ile Ala Asn Phe Ile Pro Phe Ser Asp His Asn Gln Ser Pro
      85               90               95
Arg Asn Met Tyr Gln Cys Gln Met Gly Lys Gln Thr Met Gly Phe Pro
      100              105              110
Leu Leu Thr Tyr Gln Asp Arg Ser Asp Asn Lys Leu Tyr Arg Leu Gln
      115              120              125
Thr Pro Gln Ser Pro Leu Val Arg Pro Ser Met Tyr Asp Tyr Tyr Asp
      130              135              140
Met Asp Asn Tyr Pro Ile Gly Thr Asn Ala Ile Val Ala Val Ile Ser
      145              150              155              160
Tyr Thr Gly Tyr Asp Met Glu Asp Ala Met Ile Val Asn Lys Ala Ser
      165              170              175
Trp Glu Arg Gly Phe Ala His Gly Ser Val Tyr Lys Ser Glu Phe Ile
      180              185              190
Asp Leu Ser Glu Lys Ile Lys Gln Gly Asp Ser Ser Leu Val Phe Gly
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Ile Lys Pro Gly Asp Pro Arg
      210              215

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<210> 4083
 <211> 2983
 <212> DNA
 <213> Homo sapiens

<400> 4083

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 360

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<210> 4084

<211> 362

<212> PRT

<213> Homo sapiens

<400> 4084

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			20					25					30		
Val	Tyr	Gly	Leu	Asn	Phe	Ala	Ser	Lys	Glu	Glu	Ala	Thr	Thr	Phe	Ser
		35				40					45				
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	50					55					60				
Pro	Ser	Ser	Gln	Arg	Gln	Val	Gln	Asn	Gly	Pro	Ser	Pro	Asp	Glu	Met
65				70					75					80	
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<210> 4085
<211> 2673
<212> DNA
<213> Homo sapiens
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<211> 789

<212> PRT

<213> Homo sapiens

<400> 4086

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			20					25					30		
Phe	Leu	Leu	Val	Phe	Ala	Ile	Ala	Ala	Ala	Tyr	Val	Trp	Ile	Glu	
			35				40					45			
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	50					55				60					
Thr	Leu	Ile	Leu	Thr	Ser	Val	Val	Pro	Pro	Glu	Leu	Pro	Ile	Glu	Leu
65					70					75				80	
Ser	Leu	Ala	Val	Asn	Thr	Ser	Leu	Ile	Ala	Leu	Ala	Lys	Leu	Tyr	Met
				85					90					95	
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3274

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 675 680 685
 Tyr Ile Met Ala Met Ala Met Gln Met Ala Thr Phe Ala Ile Asn Tyr
 690 695 700
 Lys Gly Pro Pro Phe Met Glu Ser Leu Pro Glu Asn Lys Pro Leu Val
 705 710 715 720
 Trp Ser Leu Ala Val Ser Leu Leu Ala Ile Ile Gly Leu Leu Leu Gly
 725 730 735
 Ser Ser Pro Asp Phe Asn Ser Gln Phe Gly Leu Val Asp Ile Pro Val
 740 745 750
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<210> 4087

<211> 959

<212> DNA

<213> Homo sapiens

<400> 4087

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<211> 319

<212> PRT

<213> Homo sapiens

<400> 4088

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		20						25					30		
Ala	Val	Ala	Arg	Val	Arg	Ser	Ala	Gly	Pro	Ser	Cys	Gln	Asn	Lys	Gly
		35					40					45			
Asp	Leu	Val	Met	Glu	Ala	Leu	Leu	Glu	Gly	Ile	Gln	Asn	Arg	Gly	His
	50					55					60				
Gly	Gly	Gly	Phe	Leu	Thr	Ser	Cys	Glu	Ala	Glu	Leu	Gln	Glu	Leu	Met
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Lys	Gln	Ile	Asp	Ile	Met	Val	Ala	His	Lys	Lys	Ser	Glu	Trp	Glu	Gly
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Arg	Thr	His	Ala	Leu	Glu	Thr	Cys	Leu	Lys	Ile	Arg	Glu	Gln	Glu	Leu
			100					105					110		
Lys	Ser	Leu	Arg	Ser	Gln	Leu	Asp	Val	Thr	His	Lys	Glu	Val	Gly	Met
		115				120						125			
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Arg	Gly	Asn	Thr	Lys	Asn	His	Arg	Glu	Asp	Arg	Ser	Glu	Ile	Glu	Arg
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Arg	Lys	Ala	Leu	Ala	Glu	Gln	Ser	Glu	Ile	Ile	Gln	Ala	Gln	Leu	Val
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<210> 4089
 <211> 511
 <212> DNA
 <213> Homo sapiens

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<210> 4090
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 <212> PRT
 <213> Homo sapiens

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 Lys Asn Tyr Ala Leu Gln Glu His Val Ser Phe Val Ile Phe Leu Ser
 35 40 45
 Ser Asn Phe Phe Trp Arg Asp Glu Ser Phe Asp Leu Thr Leu Arg Ile
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 Gly Leu Lys Pro Phe Glu Arg Thr Lys Glu Ile Glu Ser Ala Phe Leu
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<210> 4091
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 <212> DNA
 <213> Homo sapiens

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<210> 4092

<211> 146

<212> PRT

<213> Homo sapiens

<400> 4092

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Ile Trp Arg Lys Glu Pro Arg Met Val Cys Thr Arg Lys Thr Lys Thr
 50           55           60
Leu Val Ser Thr Cys Val Ile Leu Ser Gly Met Thr Asn Ile Ile Cys
 65           70           75           80
Leu Leu Tyr Val Gly Trp Val Thr Asn Tyr Ile Ala Ser Val Tyr Val
 85           90           95
Arg Gly Gln Glu Pro Ala Pro Asp Lys Lys Leu Glu Glu Asp Lys Gly
100           105           110
Asp Thr Leu Lys Ile Ile Glu Arg Leu Asp His Leu Glu Asn Val Ile
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Ser Asn
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<210> 4093

<211> 1519

<212> DNA

<213> Homo sapiens

<400> 4093

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<210> 4094

<211> 391

<212> PRT

<213> Homo sapiens

<400> 4094

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His	Asn	Val	Pro	Leu	Lys	Leu	Pro	Met	Pro	Glu	Pro	Gly	Glu	Leu	Glu
			20					25					30		
Glu	Arg	Phe	Ala	Ile	Val	Leu	Asn	Ala	Met	Asn	Leu	Pro	Pro	Asp	Lys
		35					40					45			
Ala	Arg	Leu	Leu	Arg	Gln	Tyr	Asp	Asn	Glu	Lys	Lys	Trp	Glu	Leu	Ile
	50					55					60				
Cys	Asp	Gln	Glu	Arg	Phe	Gln	Val	Lys	Asn	Pro	Pro	His	Thr	Tyr	Ile
65					70					75				80	
Gln	Lys	Leu	Lys	Gly	Tyr	Leu	Asp	Pro	Ala	Val	Thr	Arg	Lys	Lys	Phe
				85				90					95		
Arg	Arg	Arg	Val	Gln	Glu	Ser	Thr	Gln	Val	Leu	Arg	Glu	Leu	Glu	Ile
			100					105					110		
Ser	Leu	Arg	Thr	Asn	His	Ile	Gly	Trp	Val	Arg	Glu	Phe	Leu	Asn	Glu
		115					120					125			
Glu	Asn	Lys	Gly	Leu	Asp	Val	Leu	Val	Glu	Tyr	Leu	Ser	Phe	Ala	Gln
	130					135					140				
Tyr	Ala	Val	Thr	Phe	Asp	Phe	Glu	Ser	Val	Glu	Ser	Thr	Val	Glu	Ser


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145          150          155          160
Ser Val Asp Lys Ser Lys Pro Trp Ser Arg Ser Ile Glu Asp Leu His
          165          170          175
Arg Gly Ser Asn Leu Pro Ser Pro Val Gly Asn Ser Val Ser Arg Ser
          180          185          190
Gly Arg His Ser Ala Leu Arg Tyr Asn Thr Leu Pro Ser Arg Arg Thr
          195          200          205
Leu Lys Asn Ser Arg Leu Val Ser Lys Lys Asp Asp Val His Val Cys
          210          215          220
Ile Met Cys Leu Arg Ala Ile Met Asn Tyr Gln Tyr Gly Phe Asn Met
225          230          235          240
Val Met Ser His Pro His Ala Val Asn Glu Ile Ala Leu Ser Leu Asn
          245          250          255
Asn Lys Asn Pro Arg Thr Lys Ala Leu Val Leu Glu Leu Leu Ala Ala
          260          265          270
Val Cys Leu Val Arg Gly Gly His Glu Ile Ile Leu Ser Ala Phe Asp
          275          280          285
Asn Phe Lys Glu Val Cys Gly Glu Lys Gln Arg Phe Glu Lys Leu Met
          290          295          300
Glu His Phe Arg Asn Glu Asp Asn Asn Ile Asp Phe Met Val Ala Ser
305          310          315          320
Met Gln Phe Ile Asn Ile Val Val His Ser Val Glu Asp Met Asn Phe
          325          330          335
Arg Val His Leu Gln Tyr Glu Phe Thr Lys Leu Gly Leu Asp Glu Tyr
          340          345          350
Leu Asp Lys Leu Lys His Thr Glu Ser Asp Lys Leu Gln Val Gln Ile
          355          360          365
Gln Ala Tyr Leu Asp Asn Val Phe Asp Val Gly Ala Leu Leu Glu Asp
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<210> 4095

<211> 253

<212> DNA

<213> Homo sapiens

<400> 4095

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120
agagagatca agtagcatcc ccagcgaaat ctgaggcctc tggaggcgcc tgtgcacgtg
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<210> 4096

<211> 83

<212> PRT

<213> Homo sapiens

<400> 4096

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           20           25           30
Gln Val Arg Lys Leu Arg Leu Lys Arg Asp Gln Val Ala Ser Pro Ala
           35           40           45
Lys Ser Glu Ala Ser Gly Gly Ala Cys Ala Arg Val Ser Gly Ser Val
           50           55           60
Cys Pro Gly Ser Ile Ser Ala Cys Val Cys Leu Ser Arg Gln His Ile
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<210> 4097

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 4097

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120
cgtgctgtcc tcaattgttc tacaatgagt gccaaatctg ctatcagcaa ggaaattttt
180
gcacctcttg atgaaaggat gctgggagct gtccaagtca agaggaggac aaagaaaaag
240
attcctttct tggcaactgg aggtcaaggc gaatatTTaa cttatatctg cctgtcagtg
300
acaaacaaga aaccacaca ggcgtccatc acaaaggTca aacagtttga aggtccaca
360
tcatttgTtc ggagatcaca gtggatgctc gagcagcttc gccaggTtaa tggatcgat
420
cctaatgggg attcggcaga gtttgatttg ttgtttgaaa atgcttttga ccagtgggta
480
gccagcacag cgtcagaaaa atgcaccttc ttccagatcc tccaccatac ctgccagagg
540
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600
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660
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720
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780
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840
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900
ttgttttttc ttttcagatg ttaatgtgaa agaaagggtg ttgcattttt acatttcctt
960
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1020

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 aacatgtatt tttttctctg atattaagca ggaaggcatt ttaatgtggg gacatcagat
 1200
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 1260
 ctacacttaa tttgaagatt aaaattctac attgtggaaa acaattgaat ttattgggaa
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 1380
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 1385

<210> 4098

<211> 258

<212> PRT

<213> Homo sapiens

<400> 4098

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Glu	Pro	Arg	Ala	Leu	Gly	Arg	Val	Pro	Arg	Thr	Gly	Thr	Ala	Gly	Ala
			20					25					30		
Arg	Ala	Arg	Leu	His	Asp	Ser	Leu	Arg	Ala	Val	Leu	Thr	Cys	Ser	Thr
		35				40					45				
Met	Ser	Ala	Lys	Ser	Ala	Ile	Ser	Lys	Glu	Ile	Phe	Ala	Pro	Leu	Asp
	50					55				60					
Glu	Arg	Met	Leu	Gly	Ala	Val	Gln	Val	Lys	Arg	Arg	Thr	Lys	Lys	Lys
65				70					75					80	
Ile	Pro	Phe	Leu	Ala	Thr	Gly	Gly	Gln	Gly	Glu	Tyr	Leu	Thr	Tyr	Ile
			85					90					95		
Cys	Leu	Ser	Val	Thr	Asn	Lys	Lys	Pro	Thr	Gln	Ala	Ser	Ile	Thr	Lys
		100						105					110		
Val	Lys	Gln	Phe	Glu	Gly	Ser	Thr	Ser	Phe	Val	Arg	Arg	Ser	Gln	Trp
	115					120					125				
Met	Leu	Glu	Gln	Leu	Arg	Gln	Val	Asn	Gly	Ile	Asp	Pro	Asn	Gly	Asp
	130					135					140				
Ser	Ala	Glu	Phe	Asp	Leu	Leu	Phe	Glu	Asn	Ala	Phe	Asp	Gln	Trp	Val
145				150					155					160	
Ala	Ser	Thr	Ala	Ser	Glu	Lys	Cys	Thr	Phe	Phe	Gln	Ile	Leu	His	His
			165					170						175	
Thr	Cys	Gln	Arg	Tyr	Leu	Thr	Asp	Arg	Lys	Pro	Glu	Phe	Ile	Asn	Cys
		180					185						190		
Gln	Ser	Lys	Ile	Met	Gly	Gly	Asn	Ser	Ile	Leu	His	Ser	Ala	Ala	Asp
	195					200						205			
Ser	Val	Thr	Ser	Ala	Val	Gln	Lys	Ala	Ser	Gln	Ala	Leu	Asn	Glu	Arg
	210				215						220				
Gly	Glu	Arg	Leu	Gly	Arg	Ala	Glu	Glu	Lys	Thr	Glu	Asp	Leu	Lys	Asn
225				230					235					240	
Ser	Ala	Gln	Gln	Phe	Ala	Glu	Thr	Ala	His	Lys	Leu	Ala	Met	Lys	His
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Lys	Cys														

<210> 4099
 <211> 511
 <212> DNA
 <213> Homo sapiens

<400> 4099
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 120
 ttaaacaata aaaaattgta taatggaatt ggatcagggg gttcccaaaa ccccttcac
 180
 tgaggtttgg caattcactg agaaggactc acaggactca gcagatagtc atacttgggg
 240
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 300
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 360
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 511

<210> 4100
 <211> 100
 <212> PRT
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<400> 4100
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 20 25 30
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 35 40 45
 Leu Arg Lys Glu Lys Val His Val Ser Lys Ser Gly Gly Ser Gln Ala
 50 55 60
 Gln Ala Thr Gly Val Ile Ser Cys Val Ala Ser Arg Ile Cys Leu Ile
 65 70 75 80
 Pro Pro Ala Ser Asn Phe Asp Asp Thr Cys Ala Met Leu Ser Thr Leu
 85 90 95
 Pro Glu Phe His
 100

<210> 4101
 <211> 536
 <212> DNA
 <213> Homo sapiens

<400> 4101

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 120
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 180
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 420
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<210> 4102

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4102

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Arg	Val	Cys	Thr	Arg	Tyr	Lys	Ile	Gln	Glu	Arg	Trp	His	Thr	Ala	Asp
			20					25					30		
Asp	Asp	Arg	Lys	Asp	Thr	Cys	Ser	Pro	Pro	Phe	Pro	Gly	Pro	Arg	His
			35				40					45			
Val	Gln	Asn	Ser	Ser	Trp	Gly	Leu	Gln	Leu	Leu	Gly	Glu	Thr	Gln	Gly
	50					55					60				
Leu	Leu	Leu	His	Ser	Leu	Gln	Gly	Leu	Ser	Arg	Gln	Arg	Pro	Trp	Gly
65					70					75				80	
Gly	Glu	Ala	Pro	Ala	Trp	Ser	Leu	Pro	Ala	Pro	Pro	Met	Gln	Ala	Val
			85						90				95		
Glu	Gly	Arg	Thr	Arg	Arg	Arg	Thr	Arg	Arg						
			100					105							

<210> 4103

<211> 3040

<212> DNA

<213> Homo sapiens

<400> 4103

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 180
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360
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420
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<210> 4104

<211> 978

<212> PRT

<213> Homo sapiens

<400> 4104

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Ser	Glu	Ala	Asp	Arg	Ala	Gln	Lys	Met	Asp	Gly	Glu	Ser	Glu	Glu	Glu
		20						25					30		
Gln	Glu	Ser	Val	Asp	Thr	Gly	Glu	Glu	Glu	Gly	Gly	Asp	Glu	Ser	
		35				40					45				
Asp	Leu	Ser	Ser	Glu	Ser	Ser	Ile	Lys	Lys	Lys	Ser	Gln	Glu	Glu	Arg
	50					55					60				
Lys	Asp	Arg	Gln	Ser	Leu	Asp	Lys	Pro	Ala	Arg	Lys	Arg	Arg	Arg	Arg

65					70					75				80	
Ser	Arg	Lys	Lys	Pro	Ser	Gly	Ala	Leu	Gly	Ser	Glu	Ser	Tyr	Lys	Ser
				85					90					95	
Ser	Ala	Gly	Ser	Ala	Glu	Gln	Thr	Ala	Pro	Gly	Asp	Ser	Thr	Gly	Tyr
		100						105					110		
Met	Glu	Val	Ser	Leu	Asp	Ser	Leu	Asp	Leu	Arg	Val	Lys	Gly	Ile	Leu
		115					120					125			
Ser	Ser	Gln	Ala	Glu	Gly	Leu	Ala	Asn	Gly	Pro	Asp	Val	Leu	Glu	Thr
	130					135					140				
Asp	Gly	Leu	Gln	Glu	Val	Pro	Leu	Cys	Ser	Cys	Arg	Met	Glu	Thr	Pro
145					150					155					160
Lys	Ser	Arg	Glu	Ile	Thr	Thr	Leu	Ala	Asn	Asn	Gln	Cys	Met	Ala	Thr
			165						170						175
Glu	Ser	Val	Asp	His	Glu	Leu	Gly	Arg	Cys	Thr	Asn	Ser	Val	Val	Lys
		180						185					190		
Tyr	Glu	Leu	Met	Arg	Pro	Ser	Asn	Lys	Ala	Pro	Leu	Leu	Val	Leu	Cys
	195						200					205			
Glu	Asp	His	Arg	Gly	Arg	Met	Val	Lys	His	Gln	Cys	Cys	Pro	Gly	Cys
	210					215					220				
Gly	Tyr	Phe	Cys	Thr	Ala	Gly	Asn	Phe	Met	Glu	Cys	Gln	Pro	Glu	Ser
225					230					235					240
Ser	Ile	Ser	His	Arg	Phe	His	Lys	Asp	Cys	Ala	Ser	Arg	Val	Asn	Asn
			245						250					255	
Ala	Ser	Tyr	Cys	Pro	His	Cys	Gly	Glu	Ser	Ser	Lys	Ala	Lys	Glu	
		260						265					270		
Val	Thr	Ile	Ala	Lys	Ala	Asp	Thr	Thr	Ser	Thr	Val	Thr	Pro	Val	Pro
		275					280						285		
Gly	Gln	Glu	Lys	Gly	Ser	Ala	Xaa	Gly	Gly	Arg	Ala	Asp	Thr	Thr	Thr
	290					295					300				
Gly	Ser	Ala	Xaa	Pro	Gly	His	His	Ser	Arg	Arg	Thr	Thr	Ser	Cys	Arg
305					310					315					320
Val	Gln	Pro	Pro	Thr	Xaa	Pro	Glu	Gly	Phe	Asp	Pro	Thr	Gly	Pro	Ala
				325					330					335	
Gly	Leu	Gly	Arg	Pro	Thr	Pro	Gly	Leu	Ser	Gln	Gly	Pro	Gly	Lys	Glu
		340					345						350		
Thr	Leu	Glu	Ser	Ala	Leu	Ile	Ala	Leu	Asp	Ser	Glu	Lys	Pro	Lys	Lys
	355						360					365			
Leu	Arg	Phe	His	Pro	Lys	Gln	Leu	Tyr	Phe	Ser	Ala	Arg	Gln	Gly	Glu
	370					375					380				
Leu	Gln	Lys	Val	Leu	Leu	Met	Leu	Val	Asp	Gly	Ile	Asp	Pro	Asn	Phe
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Ile	Asp	Thr	Cys	Ser	Glu	Asp	Gln	Arg	Thr	Pro	Leu	Met	Glu	Ala	Ala
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Glu	Asn	Asn	His	Leu	Glu	Ala	Val	Lys	Tyr	Leu	Ile	Lys	Ala	Gly	Ala
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Asp	Met	Gly	Trp	Gly	Val	Arg	Ser	Leu	Gln	Asp	Ile	Pro	Pro	Gly	Thr								
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Trp Glu Val Arg Tyr Glu Pro Asp Ser Lys Ala Phe Gly Val Gly Val

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Ala Tyr Arg Ser Leu Gly Arg Phe Glu Gln Leu Gly Lys Thr Ala Ala		
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Ser Trp Cys Leu His Ser Thr Ile Gly Cys Arg Ser Ala Ser Arg Lys		80
	85	90
His Ala Asn Lys Val Lys Val Leu Asp Ala Pro Val Pro Asp Cys Leu		95
	100	105
Gly Val His Cys Asp Phe His Gln Gly Leu Leu Ser Phe Tyr Asn Ala		110
	115	120
Arg Thr Lys Gln Val Leu His Thr Phe Lys Thr Arg Phe Thr Gln Pro		125
	130	135
Leu Leu Pro Ala Phe Thr Val Trp Cys Gly Ser Phe Gln Val Thr Thr		140
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Gly Leu Gln Val Pro Ser Ala Val Arg Cys Leu Gln Lys Arg Gly Ser		160
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Ala Thr Ser Ser Ser Asn Thr Ser Leu Thr		175
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<211> 1442

<212> DNA

<213> Homo sapiens

<400> 4107

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 35 40 45
 Gly Thr Val Gly Arg Leu Asn Ile Thr Val Val Gln Ala Lys Leu Ala
 50 55 60
 Lys Asn Tyr Gly Met Thr Arg Met Asp Pro Tyr Cys Arg Leu Arg Leu
 65 70 75 80
 Gly Tyr Ala Val Tyr Glu Thr Pro Thr Ala His Asn Gly Ala Lys Asn
 85 90 95
 Pro Arg Trp Asn Lys Val Ile His Cys Thr Val Pro Pro Gly Val Asp
 100 105 110
 Ser Phe Tyr Leu Glu Ile Phe Asp Glu Arg Ala Phe Ser Met Asp Asp
 115 120 125
 Arg Ile Ala Trp Thr His Ile Thr Ile Pro Glu Ser Leu Arg Gln Gly
 130 135 140
 Lys Val Glu Asp Lys Trp Tyr Ser Leu Ser Gly Arg Gln Gly Asp Asp
 145 150 155 160
 Lys Glu Gly Met Ile Asn Leu Val Met Ser Tyr Ala Leu Leu Pro Ala
 165 170 175
 Ala Met Val Met Pro Pro Gln Pro Val Val Leu Met Pro Thr Val Tyr
 180 185 190
 Gln Gln Gly Val Gly Tyr Val Pro Ile Thr Gly Met Pro Ala Val Cys
 195 200 205
 Ser Pro Gly Met Val Pro Val Ala Leu Pro Pro Ala Ala Val Asn Ala

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Pro	Asn	Met	Asp	Gln	Glu	Val	Ile	Arg	Ser	Val	Leu	Glu	Ala	Gln	Arg
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 <211> 1637
 <212> DNA
 <213> Homo sapiens

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<210> 4110
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 <212> PRT
 <213> Homo sapiens

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 His Ser Arg Lys Ser Leu Cys Arg Ser Arg Glu Glu Leu Arg Gly Lys
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 Val Arg Glu Leu Ala Ser Ala Val Arg Asn Ala Lys Tyr Leu Val Val
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 85 90 95
 Gly Pro Asn Gly Val Trp Thr Leu Leu Gln Lys Gly Arg Ser Val Ser
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 Ala Ala Asp Leu Ser Glu Ala Glu Pro Thr Leu Thr His Met Ser Ile
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 Thr Arg Leu His Glu Gln Lys Leu Val Gln His Val Val Ser Gln Asn
 130 135 140
 Cys Asp Gly Leu His Leu Arg Ser Gly Leu Pro Arg Thr Ala Ile Ser
 145 150 155 160
 Glu Leu His Gly Asn Met Tyr Ile Glu Val Cys Thr Ser Cys Val Pro
 165 170 175
 Asn Arg Glu Tyr Val Arg Val Phe Asp Val Thr Glu Arg Thr Ala Leu
 180 185 190
 His Arg His Gln Thr Gly Arg Thr Cys His Lys Cys Gly Thr Gln Leu
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 Arg Asp Thr Ile Val His Phe Gly Glu Arg Gly Thr Leu Gly Gln Pro
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 Leu Asn Trp Glu Ala Ala Thr Glu Ala Ala Ser Arg Ala Asp Thr Ile

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Leu	Cys	Leu	Gly	Ser	Ser	Leu	Lys	Val	Leu	Lys	Lys	Tyr	Pro	Arg	Leu
				245					250					255	
Trp	Cys	Met	Thr	Lys	Pro	Pro	Ala	Gly	Gly	Arg	Leu	Tyr	Ile	Val	Asn
			260					265					270		
Leu	Gln	Trp	Thr	Pro	Lys	Asp	Asp	Trp	Ala	Ala	Leu	Lys	Leu	His	Gly
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Ile	Pro	Ala	Tyr	Ser	Arg	Trp	Gln	Asp	Pro	Ile	Phe	Ser	Leu	Ala	Thr
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Pro	Leu	Arg	Ala	Gly	Glu	Glu	Gly	Ser	His	Ser	Arg	Lys	Ser	Leu	Cys
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Arg	Ser	Arg	Glu	Glu	Ala	Pro	Pro	Gly	Asp	Arg	Gly	Ala	Pro	Leu	Ser
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Ser	Ala	Pro	Ile	Leu	Gly	Gly	Trp	Phe	Gly	Arg	Gly	Cys	Thr	Lys	Arg
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 <212> DNA
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<210> 4112
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 35 40 45
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 50 55 60
 Asp Thr Arg Arg Leu Ser Phe Leu Val Ser Tyr Ile Ala Ser Lys Lys
 65 70 75 80
 Ile His Thr Glu Pro Gln Leu Ser Ala Ala Leu Glu Tyr Val Arg Ser
 85 90 95
 His Pro Leu Asp Pro Ile Asp Thr Val Asp Phe Glu Arg Glu Cys Gly
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 Val Gly Val Ile Val Thr Pro Glu Gln Ile Glu Glu Ala Val Glu Ala
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 Ala Ile Asn Arg His Arg Pro Gln Leu Leu Val Glu Arg Tyr His Phe
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 145 150 155 160
 Asp Gly Lys Met Ile Lys Asn Glu Val Asp Met Gln Val Leu His Leu
 165 170 175
 Leu Gly Pro Lys Leu Glu Ala Asp Leu Glu Lys Lys Phe Lys Val Ala
 180 185 190
 Lys Ala Arg Leu Glu Glu Thr Asp Arg Arg Thr Ala Lys Asp Val Val
 195 200 205
 Glu Asn Gly Glu Thr Ala Asp Gln Thr Leu Ser Leu Met Glu Gln Leu
 210 215 220
 Arg Gly Glu Ala Leu Lys Phe His Lys Pro Gly Glu Asn Tyr Lys Thr
 225 230 235 240
 Pro Gly Tyr Val Val Thr Pro His Thr Met Asn Leu Leu Lys Gln His
 245 250 255
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 260 265 270
 Asn Gly Ile Leu His Ile Gly His Ala Lys Ala Ile Asn Phe Asn Phe
 275 280 285
 Gly Tyr Ala Lys Ala Asn Asn Gly Ile Cys Phe Leu Arg Phe Asp Asp
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 Thr Asn Pro Glu Lys Glu Glu Ala Lys Phe Phe Thr Ala Ile Cys Asp
 305 310 315 320
 Met Val Ala Trp Leu Gly Tyr Thr Pro Tyr Lys Val Thr Tyr Ala Ser

3298